DEPARTMENT OF ENVIRONMENTAL CONSERVATION AIR QUALITY OPERATING PERMIT

Permit No. 082TVP01 Issue Date: November 28, 2003 Application No. 082 Expiration Date: December 31, 2008 Revision 1:

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues a revised operating permit to the Permittee, **Alyeska Pipeline Service Company**, for the operation of the **Valdez Marine Terminal**. This revision incorporates the modifications made in Construction Permit No. 082CP04 Revision 1 issued May 7, 2004, correction of typographical errors, the partial agreement between the Department and the Permittee signed on June 18, 2004 on appealed conditions in 082TVP01 issued November 28, 2003, and removal of Source ID 7 and all its associated permit requirements.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

All facility-specific terms and conditions of Air Quality Control Permit-to-Operate No. 9671-AA001, as revised under Construction Permit No. 082CP05, and Air Quality Control Construction Permit No. 082CP04 Revision 1 have been incorporated or subsumed into this Operating Permit.

This Operating Permit becomes effective January 1, 2004.

John F. Kuterbach, Manager Air Permits Program

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List of Abbreviations Used in this Permit

or or Approviation	io odda iii tiilo i ciriik
AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
ВНр	Boiler Horsepower
C.F.R	Code of Federal Regulations
C.F.M	Cubic Feet per Minute
CO	Carbon Monoxide
dscf	Dry standard cubic foot
EPA	US Environmental Protection Agency
gr./dscf	grain per dry standard cubic foot (1 pound = 7000 grains)
	gallons per hour
HAPs or HACs	Hazardous Air Pollutants or Hazardous Air Contaminants [<i>HAPs</i> or <i>HACs</i> as defined in AS 46.14.990(14)]
	Source Identification Number
kPa	
	Lowest Achievable Emission Rate
	Maximum Achievable Control Technology as defined in 40 C.F.R. 63.
	Monitoring, Recordkeeping, and Reporting
-	National Ambient Air Quality Standard
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants [NESHAPS as contained in 40 C.F.R. 61 and 63]
NO _X	Nitrogen Oxides
NSPS	Federal New Source Performance Standards [<i>NSPS</i> as contained in 40 C.F.R. 60]
O & M	Operation and Maintenance
ORL	Owner Requested Limit
O ₂	Oxygen
PM-10	Particulate Matter less than or equal to a nominal ten microns in diameter
	Parts per million
	Parts per million by volume on a dry basis
	Pounds per Square Inch (absolute)
	Prevention of Significant Deterioration
	Potential to Emit
	Standard Industrial Classification
	State Implementation Plan
SO ₂	
TPH	
TPY	
	volatile organic compound [VOC as defined in 18 AAC 50.990(103)]
VOL	volatile organic liquid [VOL as defined in 40 C.F.R. 60.111b, Subpart Kb]

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Section 1. Identification

Names and Addresses

Permittee: **Alyeska Pipeline Service Company**

P.O. Box 196660

Anchorage, AK 99519-6660

Facility Name: **Valdez Marine Terminal**

Location: Sections 17-20, T9S, R6W, and Section 13, T9S, R7W

Copper River Meridian, Alaska

Physical Address: At the Very West End of Dayville Road

Valdez, Alaska

Owners of the Trans-Alaska Pipeline System Owner:

Alyeska Pipeline Service Company Operator:

P.O. Box 196660

Anchorage, AK 99519-6660

Permittee's Responsible Official Rod Hanson, Terminal Manager

Designated Agent: **CT** Corporation

801 West Tenth Street, Suite 300

Juneau, AK 99801

Facility and Permitting Contact: Bradley C. Thomas, Sr. Environmental Engineer

P.O. Box 196660

Anchorage, AK 99519-6660

(907) 787-8806

thomasb2@alyeska-pipeline.com

Fee Contact: **Environmental Administrative Assistant**

> P.O. Box 60469 Fairbanks, AK 99706

(907) 450-5535

Facility Process Description

SIC Code of the Facility: 4491 - Marine Cargo Handling

[18 AAC 50.350(b)(1), 1/18/97]

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Section 2. General Emission Information

[18 AAC 50.350(b)(1), 1/18/97]

Emissions of Regulated Air Contaminants, as provided in the Permittee's application:

Nitrogen Oxides, Carbon Monoxide, Sulfur Dioxide, Particulate Matter (less than 10 microns), Volatile Organic Compounds, p-Xylenes, 1,3-Butadiene, Acrolein, Asbestos m-Xylenes, Toluene, Phenol, Xylenes (isomers and mixture), Formaldehyde, 2,2,4-Trimethylpentane, Benzene, Cumene, Acetaldehyde, Naphthalene, o-Xylenes, Ethylene Glycol, Hexane (as n-Hexane), Polycyclic Organic Matter, Carbonyl Disulfide, Arsenic, Beryllium, Chromium Compounds, Cobalt Compounds, Lead, Mercury, Halon, Freon, Reduced Sulfur Compounds, Hydrogen Sulfide, Methanol, Ethylbenzene, and Glycol Ethers.

Facility Classifications:

- 18 AAC 50.300(b)(2)
- (2) 18 AAC 50.300(b)(3)
- 18 AAC 50.300(c)(1) (3)
- 18 AAC 50.300(c)(2)(W) (4)
- (5) 18 AAC 50.300(f)

Operating Permit Classifications:

- 18 AAC 50.325(b)(1)
- 18 AAC 50.325(b)(2) (2)
- (3) 18 AAC 50.325(b)(3)
- 18 AAC 50.325(c) (4)

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Source Inventory and Description Section 3.

[18 AAC 50.350(d)(2), 1/18/97]

Sources listed in Table 1 have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1 - Source Inventory

ID	Source Name	Source Description	Rating/size	Construction/ Modify Date
I. Powe	er Boilers		•	-
1	52-SG-1A	Combustion Engineering Power Boiler	242 MMBtu/hr	1975
2	52-SG-1B	ž č		1975
3	52-SG-1C	Combustion Engineering Power Boiler	242 MMBtu/hr	1975
II. Inci	nerators			
4	53-IN-1A	John Zink Waste Gas Incinerator	400 MMBtu/hr	1975
5	53-IN-1B	John Zink Waste Gas Incinerator	400 MMBtu/hr	1975
6	53-IN-1C	John Zink Waste Gas Incinerator	400 MMBtu/hr	1975
III. Die	esel-Fired Generators	•		
8	52-EG-1	GM S-12E4 Emergency Generator	1670 kW	1979
9	58-G-1	SS 69937 Lifeline Generator	1050 kW	1975
IV. Die	sel-Fired Firewater Pu	mp Drivers		
10	58-P-3A	Cummins KTA-50-C Main	1325 hp	1990
11	58-P-3B	Cummins KTA-50-C Main	1325 hp	1990
12			1990	
13			1975	
14	54-P-3BD Cummins KTA-2300-FS East 763 hp 1975		1975	
15	55-P-3AD	Cummins KTA-2300-FS West	864 hp	1975
16	55-P-3BD	Cummins KTA-2300-FS West	864 hp	1975
V. Soil	Vapor Extraction (SV)		, ,	
17	SVE System	SVE System ¹	920 cfm max 611 cfm design	1999
VI. Tar	nk Bottom Processing (TBP) Equipment	orr orm design	
18	TBP Boilers	Diesel fuel-/Propane-fired Boilers	6.0 MMBtu/hr max each	2003
			if burning propane 6.2 MMBtu/hr max each	
			if burning only distillate fuel	
			18.5 MMBtu/hr	
			combined capacity	
19-20	TBP Mixing Tanks	Centrifuge system connected to two mixing tanks	500 bbl each	2003
21	Settling Tank	Storage Tank for water recovered from TBP	500 bbl	1975
22	Containers	Devices for the storage of recovered solids and additives and conveying equipment for tank bottom processing	N/A	2003
23	Steam Dryer/Thermal Desorption Unit	Steam heated device for hydrocarbon recovery from tank bottom solids	1,500 bbl/day	2003
24-27	Internal combustion engines (ICEs) ²	Ford Model LSG 875 with catalytic converters fired with propane and collected hydrocarbon vapors.	193 hp and 350 scf exhaust each	2003

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ID	Source Name	Source Description	Rating/size	Construction/ Modify Date
28	Carbon Adsorption Beds	2-Carbon Adsorption beds for VOC emission controls in parallel with Sources 24 – 27.	500 CFM (blower capacity, combined beds)	2003
VII. Cr	ude Oil Tanks			
29-42	54-TK-1 through 14	East Tank Farm: 14 Crude Oil Storage Tanks	510,000 bbl each	1975
43-46	55-TK-15 through 18	West Tank Farm: 4 Crude Oil Storage Tanks	510,000 bbl each	1975
VIII. L	oading Berths			
47-48	Berths 1 and 3	Loading Berths w/o Vapor Collection	100,000 bbl/hr	1975
49-50	Berths 4 and 5	Loading Berths w/ Vapor Collection	100,000 bbl/hr	1975
IX. Oth	er Significant Sources ³			
57-58	51-TK-80 51-TK-81	2-Recovered Crude Oil Tanks (Ballast Water Treatment)	36,000 bbl each	Before August 1977
59-61	51-TK-92 51-TK-93 51-TK-94	3-Ballast Water Storage Tanks (Ballast Water Treatment)	430,0000 bbl each	Before August 1977
62-63	58-TK-74 58-TK-75	2-Biological Treatment Tanks (Ballast Water Treatment)	5,500,000 gallon each	1991
64–65	58-FA-1 58-FA-2	Air Strippers (West Biological Treatment Tanks)	20,000 scfm each	1991
66-67	58-FA-3 58-FA-4	Air Strippers (East Biological Treatment Tanks)	20,000 scfm each	1991
68-73	51-FC-1 through 6	6-Dissolved Air Flotation Tanks	24'W x 144'L x 12' water depth, 5,800 gpm each (Ballast Water Treatment)	Before August 1977
74	None	Dissolved Air Flotation Effluent Channel	30 million gal/day (Ballast Water Treatment)	Before August 1977

Table Notes:

- 1. The SVE system consists of:
 - 1-Regenerative blower;
 - 3-Schedule 40 PVC vertical recovery wells (RW-1, RW-2, & RW-3);
 - 4-Schedule 40 PVC horizontal collector lines (HW-D1 through D4); and
 - 1-SVE process module
- 2. The ICEs, Source ID(s) 24 27, are nonroad engines (as defined in 40 C.F.R. 89.2) and therefore not subject to the SIP standards.
- 3. These are existing significant sources in the facility that are pre-PSD and/or are not subject to SIP/NSPS/NESHAPs emissions standards.

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Section 4. **Emission Fees**

1. **Assessable Emissions.** The Permittee shall pay to the Department an annual emission fee based on the facility's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

- 1.1 the facility's assessable potential to emit of 7,214 TPY; or
- 1.2 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the Department, when demonstrated by
 - an enforceable test method described in 18 AAC 50.220; a.
 - b. material balance calculations;
 - c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
 - d. other methods and calculations approved by the Department. [18 AAC 50.346(a)(1), 5/3/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]
- 2. **Assessable Emission Estimates.** Emission fees will be assessed as follows:
 - 2.1 no later than March 31 of each year, the Permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or
 - 2.2 If no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 1.1.

[18 AAC 50.346(a)(1), 5/3/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

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Section 5. Source-Specific Requirements

Incinerators, Industrial Processes, and Fuel-Burning Equipment

- 3. Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source ID(s) 1 6 and 8 16 listed in Table 1 to reduce visibility through the exhaust effluent by any of the following:
 - a. more than 20 percent for a total of more than three minutes in any one hour¹; [18 AAC 50.050(a)(2) & 50.055(a)(1), 1/18/97 and 18 AAC 50.350(d)(1)(D), 6/21/98] [40 C.F.R. 52.70, 7/01/01]
 - b. more than 20 percent averaged over any six consecutive minutes². [18 AAC 50.050(a) & 50.055(a)(1) & 50.346(c), 5/3/02 and 18 AAC 50.350(d)(1)(C), 6/21/98]
 - 3.1 For Source ID(s) 1 6 and 8 16, monitor, record and report in accordance with Section 7.

[18 AAC 50.350(g) - (i) & 50.346(c), 5/3/02] [18 AAC 50.350(d)(1)(D), 6/21/98 and 50.350(g) - (i), 5/3/02]

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- 4. Particulate Matter. The Permittee shall not cause or allow particulate matter emitted
 - a. from Source ID(s) 1-3, and 8-16, to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours; [18 AAC 50.055(b)(1), 1/18/97 and 50.350(d)(1)(C), 6/21/98]
 - b. from Source ID(s) 4 6, to exceed 0.08 grains per cubic foot of exhaust gas corrected to 12 percent carbon dioxide and standard conditions, averaged over three hours.

[18 AAC 50.050(b), 1/18/97 and 50.350(d)(1)(C), 6/21/98]

4.1 For Source ID(s) 1 - 6 and 8 - 16, monitor, record and report in accordance with Section 7.

[18 AAC 50.346(c) & 50.350(g) - (i), 5/3/02]

5. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2 , from Source ID(s) 1 – 3 and 8 - 16 to exceed 500 ppm averaged over three hours.

[18 AAC 50.346(c), 5/3/02; 18 AAC 50.055(c), 1/18/97; and 18 AAC 50.350(d)(1)(C), 6/21/98]

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¹ For purposes of this permit, the "more than three minutes in any one hour" criterion in this condition and condition 41.1 will no longer be effective when the Air Quality Control (18 AAC 50) regulation package effective 5/3/02 is adopted by the U.S. EPA.

² The six-minute average standard is enforceable only by the state until 18 AAC 50.055(a)(1), dated May 3, 2002, is approved by EPA into the SIP at which time this standard becomes federally enforceable.

For fuel oil³, Source ID(s) 1 - 3 and 8 - 16

- 5.1 The Permittee shall do one of the following for each shipment of fuel:
 - a. If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount; or
 - b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and
 - (i) test the fuel for sulfur content; or
 - (ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.
- 5.2 Fuel testing under condition 5.1 must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the Department.
- 5.3 If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO₂ emissions in ppm using either Section 16 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).
- 5.4 The Permittee shall report as follows:
 - a. If SO₂ emissions calculated under condition 5.3 exceed 500 ppm, the Permittee shall report under condition 67. When reporting under this condition, include the calculation under Section 16.
 - b. The Permittee shall include in the report required by condition 69
 - (i) a list of the fuel grades received at the facility during the reporting period;
 - (ii) for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and
 - (iii) for fuel with a sulfur content greater than 0.75 percent, the calculated SO₂ emissions in ppm.

 $[18 \ AAC \ 50.346(c) \ \& \ 350(g) - (i), \ 5/3/02] \\ [Cond. \ 24 \ \& \ Exhibit \ C, \ AQC \ Permit \ No. \ 9671-AA001, \ 6/06/96]$

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³ Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 C.F.R. 60.42b, effective 7/1/01.

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For Waste Gas-fired Sources, Source ID(s) 1 – 3

5.5 Monitoring -

- For waste gas fuel-fired sources, Source ID(s) 1 3, the analytical test results for H₂S content in representative waste gas samples conducted on June 23, 2004 following 40 C.F.R. 60, Appendix A, Method 11 shall be considered compliance demonstration with sulfur compound emissions standard in condition 5 during the life of this permit
- Recordkeeping Keep records of the H₂S content analyses performed under condition 5.5a.
- Reporting -5.7
 - Report as excess emissions, in accordance with condition 67, whenever the a. fuel combusted causes sulfur compound emissions to exceed the standard of condition 5.

[18 AAC 50.346(c) & 350(g) - (i), 5/3/02]

Marine Vessel Emission Standards

- 6. Marine Vessel Visible Emission Standards. While at berth at the Valdez Marine Terminal, visible emissions, excluding condensed water vapor, may not reduce visibility through the exhaust effluent of a marine vessel by more than 20 percent, except as follows:
 - visibility may be reduced by up to 100 percent for periods aggregating no more a. than
 - (i) three minutes in any one hour; and
 - an additional three minutes during initial startup⁴ of a vessel. (ii)
 - **Monitoring.** For each vessel tanker that is berthed at the VMT, monitor for 6.1 compliance with condition 6 by conducting a visible emissions surveillance from the time the vessel is berthed up to the time it has finished initial startup⁵.
 - Conduct a Method 9 observation in accordance with condition 19.1, whenever a. significant visible emissions or visible emissions exceeding 20 percent opacity are observed from the vessel.
 - 6.2 **Recordkeeping.** The Permittee shall record opacity readings during the Method 9 observations conducted under condition 6.1a, the name of the tanker vessel, and in accordance with condition 20.1a.

⁴ For purposes of this permit, "initial startup" of a vessel includes the period during which a vessel is testing equipment in preparation to casting off while or immediately after the loading and unloading operations.

⁵ See footnote 4.

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Reporting. The Permittee shall 6.3

- include in each facility operating report under condition 69 copies of the a. records required under condition 6.2.
- b. report under condition 67
 - (i) the results of Method 9 observations that exceed the limit in condition 6;
 - if any monitoring under Condition 6.1 was not performed when required, (ii) within three days of the date the monitoring was required.
- notify immediately and provide a copy of the information required under c. Condition 6.3b to the Valdez Marine Terminal Oversight Unit (VMTOU) staff⁶ by phone ((907) 834-6700) or facsimile ((907) 834-6700) and VMTOU's mailing address (P.O. Box 9990, Valdez, AK 99686).

[18 AAC 50.070(1), 1/18/97; 50.350(d)(1)(D), 6/21/98 and 50.350(g)-(i), 5/03/02] [Cond. 15, AQC Permit No. 9671-AA001, 6/06/96] [Cond. 26.4, Construction Permit No 082CP05, 09/25/03]

⁶ The Department will make administrative revision for any unforeseen re-organization of the VMTOU.

Section 6. Ambient Air Quality Standards, Maximum Allowable Ambient Concentrations, Best Available Control Technology (BACT) and PSD Avoidance Limits

Limits to protect Ambient Air Quality (NAAQS)

- 7. Loading Berths, Source ID(s) 47 50. Until the Department approves an ambient impact analysis demonstrating that maximum cumulative 3-hour sulfur dioxide impact is less than $780 \mu g/m^3$ at the vicinity of the VMT, the Permittee shall
 - 7.1 conduct a fuel oil bunker sulfur analysis of a representative sample of diesel engine/boiler fuel oil from each crude oil tanker each time it berths at the facility;
 - 7.2 submit to the Department in the facility operating report under condition 69, a tabulation of the results of all such tests by tanker name.

[Construction Permit No. 082CP05, 9/25/03] [18 AAC 50.350(d)(1)(D), 1/18/97 and 50.350(g) – (i), 5/03/02]

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- **8. Heat Input Limits for Power Boilers and Waste Gas Incinerators:** The Permittee shall limit the combined heat input of the Power Boilers (Source ID(s) 1 3) and the combined heat input of the Waste Gas Incinerators (Source ID(s) 4 6) to no more than the limit indicated in Table 2.
 - 8.1 Measure and record the total monthly volume of liquid (in gallons) and gaseous (in standard cubic foot) fuel consumed in Source ID(s) 1 6 using industry standard and reliably maintained equipment. The liquid fuel consumption for Source ID(s) 1 6 shall be continuously monitored and recorded on an hourly basis.
 - 8.2 For each shipment of liquid fuel destined to be consumed by Source ID(s) 1-6, determine and record the heat content of the liquid fuel by either of the following two methods:
 - a. analyze for specific heat content in BTU/pound or BTU/gallon and determine the fuel's specific gravity using an ASTM method approved by the Department; or
 - b. obtain from the fuel supplier an analysis of the heat content of the liquid fuel determined using an ASTM method approved by the Department.
 - 8.3 Continuously monitor the heat content of the gaseous fuels consumed in each Source ID(s) 4 6 using an on-line calorimeter or an alternative instrumentation and methodology approved by the Department, as follows:
 - a. the on-line calorimeter or an alternative instrumentation and methodology employed shall be able to provide readings that allow for determination of the heat content in BTU/standard cubic foot of gas; and

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> b. the on-line calorimeter or an alternative instrumentation shall be maintained in a working order sufficient to provide reliable readings of the waste gas heat content with a maximum error not to exceed 5%.

- The Permittee may use the heat content described in the Waste Gas Incinerators, 8.4 Source ID(s) 4 – 6, to characterize the waste gas burned in the Power Boilers, Source ID(s) 1 - 3.
- If the alternative instrumentation or analytical methods used in conditions 8.2 and 8.3 are not cited in 18 AAC 50.035, within 90 days of the issue date of this permit, submit a description of the methods for Department's approval.
- 8.6 Calibrate, operate, and maintain in good working order the continuous monitoring systems used in conditions 8.1 and 8.3.
- Determine and record for each month the average heat input to the power boilers and 8.7 the waste gas incinerators, as follows:
 - divide the combined total heat input to the power boilers by the number of a. hours in that month; and
 - divide the combined total heat input to the waste gas incinerators by the b. number of hours in that month.
- Submit a copy of the records required by condition 8.7 with the facility operating 8.8 report required by Condition 69.
- 8.9 Report under condition 67 if the combined heat input to the power boilers or the waste gas incinerators, as determined in conditions 8.7a and 8.7b, respectively, exceed the limits indicated in Table 2.

[18 AAC 50.045(c), 50.335(g), 50.350(d)(1(D), 1/18/97 & 50.350(g)-(i), 5/03/02] [Conds. 2, 7, & 22, Exhibits B & C, AQC Permit No. 9671-AA001, 6/06/96]

- 9. Operational Hour Limits, Source ID(s) 8 - 16. The Permittee shall limit the hours of operation of Source ID(s) 8 - 16 to no more than the limit indicated in Table 2.
 - For each month, the Permittee shall record and total the operational hours of each of Source ID(s) 8 – 16 for each month and the most recent consecutive 12-month period.
 - Submit a copy of the records required by condition 9.1 with the facility operating 9.2 report required by condition 69.
 - 9.3 Report under condition 67 if any of Source ID(s) 8 – 16 exceeds the limit indicated in Table 2.

[18 AAC 50.045(c), 50.335(g), 50.350(d)(1(D), 1/18/97 & 50.350(g)-(i), 5/03/02] [Conds. 1, 2 & 9, Exhibits B & D, AQC Permit No. 9671-AA001, 6/06/96]

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Table 2 – Operational Limits

Source ID	Source Description	Operational Limits
1 - 3	Power Boilers	500 MMBtu/hr, total combined monthly average
4 – 6	Waste Gas Incinerators	522 MMBtu/hr, total combined monthly average
8 & 9	Emergency Generators	312 hours per consecutive 12-month period for routine testing and maintenance, each unit. This limit does not apply to emergency operations.
10 - 16	Firewater Diesel Pump Drivers	156 hours per consecutive 12-month period for routine testing and maintenance, each unit. This limit does not apply to emergency operations.

- 10. Crude Oil Storage Tanks, Source ID(s) 29 46. The Permittee shall not cause or allow Source ID(s) 29 46 to vent to atmosphere. For purposes of this permit, venting begins when the internal pressure of any crude oil storage tank is at or greater than 1.5 inch water column. Venting ends when that tank's or the last tank's (if multiple tanks are venting) internal pressure is less or equal to 1.2 inch water column, which indicates that vent valves have all closed.
 - 10.1 Collect working loss and breathing loss vapors from Source ID(s) 29 46 and dispose of them via combustion in any of the power boilers, Source ID(s) 1 − 3, or the waste gas incinerators, Source ID(s) 4 6.

[Cond. 11, Construction Permit No. 082CP05, 9/25/03]

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10.2 Operate and maintain at least one pressure-sensing device on each crude oil storage tank in a manner that provides accurate, reliable readings of the tank's internal pressure.

[Cond. 22 & Exhibit C, AQC Permit No. 9671-AA001, 6/6/96]

10.3 Continuously monitor the pressures of each crude oil storage tank. Perform and document annual verification of system condition and operability of all crude tank pressure recorder/controllers.

[Cond. 22 & Exhibit C, AQC Permit No. 9671-AA001, 6/6/96]

10.4 Operate crude oil storage tanks and their vapor recovery system according to the Vapor Recovery Best Operational Management Plan submitted June 15, 1994, or the most recent version approved by the Department.

[Cond. 13, AQC Permit No. 9671-AA001, 6/6/96]

10.5 Report in accordance with Condition 67 as excess emissions any venting to the atmosphere from the crude oil storage tanks, Source ID(s) 29 – 46.

[18 AAC 50.350(g)-(i), 5/03/02]

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Limits to avoid PSD classification for VOC

Soil Vapor Extraction System, Source ID 17

11. The Permittee shall limit the VOC emissions from the soil vapor extraction system, Source ID 17, to fewer than 5.0 tons per consecutive 12-month period.

[Cond. 11.2, Construction Permit No. 082CP04 Revision 1, 5/07/04]

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- 11.1 Monitor SVE system performance and emissions according to the following schedule:
 - a. At least once each month, Permittee shall sample the SVE exhaust and measure the organic compound emission rate as carbon using the testing, calibration, and calculation procedures of sections 7 and 8 of 40 CFR 60, Appendix A, Method 25A (July 1, 1995 ed.)
 - b. When performing the volatile organic compound emission rate measurement, Permittee shall also measure the stack gas flow rate; and
 - c. Permittee shall use the measurements collected pursuant to conditions 11.1a and 11.1b to calculate and record the mass emission rate of organic compounds as carbon each month

[Cond. 16, Construction Permit No. 082CP04 Revision 1, 5/07/04] [18 AAC 50.350(d)(1)(D) and 50.350(g),1/18/97]

- 11.2 Record, maintain, and submit on request for Department review, the original, or copy of the following:
 - a. field notes, logs, and documentation describing sampling conditions, sampling personnel, analytical method and laboratory;
 - b. laboratory reports describing analytical method, quantification limits, quality assurance and quality control results, and analysis results reported in standard units;
 - c. operational data or field logs describing process conditions during sample collection including, but not limited to, SVE exhaust flowrate, temperature, pressure, ambient conditions, wellhead pressures, and manifold pressures;
 - d. operational or field logs recording qualitative evaluation of exhaust flow characteristics during normal and during sample events; and
 - e. calculation sheets describing the use of measured flowrates and analyticallydetermined concentrations of volatile organic compounds in estimating mass emission rates. List the methodology used in determining the emission rates
- 11.3 Attach to the facility operating report under Condition 69 an estimate of SVE VOC emission rates for each month with a summary of VOC analytical data, measured flow rates, and monitoring results used in estimating VOC emission rates.

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11.4 Report under condition 67 if Source ID 17 exceeds the limit in condition 11.

[Cond. 17 - 17.5 & 27.2, Construction Permit No. 082CP04 Revision 1, 5/07/04] [18 AAC 50.350(d)(1)(D) and 50.350(h) & (i), 5/03/02]

<u>Tank Bottoms Processing (TBP) System, Source ID(s)</u> 18 – 28

12. The Permittee shall limit the VOC emissions from the tank bottoms processing system, Source ID(s) 18 - 28 to fewer than 18.5 tons as carbon per consecutive 12-month period.

[Cond. 11.1, Construction Permit No. 082CP04 Revision 1, 5/07/044]

- Operate the TBP system for no greater than 4,368 hours per consecutive 12a. month period.
 - (i) Boiler units (Source ID 18) may be used for tasks other than the TBP process. Limit operation of each boiler unit to no greater than 4,368 hours per consecutive 12-month period.
 - (ii) Limit the combined heat input capacity of boilers in Source ID 18 to no greater than 18.5 MMBtu/hr and individual boiler capacity to no greater than 6 MMBtu/hr if burning propane or 6.2 MMBtu/hr if burning only distillate fuel oil.

[Cond. 12, Construction Permit No. 082CP04 Revision 1, 5/07/04]

Limit processing through the TBP system to no more than 130,000 BBL (not b. including water) per consecutive 12-month period. Process only heavy crude oil components collected from the VMT crude oil, recovered oil, and ballast water handling systems.

[Cond. 13, Construction Permit No. 082CP04 Revision 1, 5/07/04]

c. The permittee shall ensure that emissions from each mix tank, the centrifuge, settling tank and the dryer (thermal desorption unit) are collected by a vapor recovery system and reduced using any of Source IDs 24 - 28 when the tank bottom processing system is in operation.

[Cond. 8.2, Construction Permit No. 082CP04 Revision 1, 5/07/04]

- d. Operate VOC emission controls, consisting of internal combustion engines with catalytic converters (Source ID(s) 24 – 27) to combust hydrocarbon vapors emitted from the TBP system, during all times of TBP operations, as follows:
 - (i) Either combust hydrocarbon vapors emitted from the TBP system in the internal combustion engines with catalytic converters (Source IDs 24 -27) or reduce vapors using a carbon adsorption bed system (Source ID 28). The permittee may use carbon adsorption beds (Source ID 28) parallel with the internal combustion engines (Source IDs 24 - 27).
 - (ii) If the temperature of Source ID 23 (dryer) is not monitored and recorded, route vapors from Source ID 23 to Source ID(s) 24 – 27 at any time Source ID 23 contains solids yet to be processed.

(iii) If the temperature of Source ID 23 is monitored and recorded, then the Permittee must route Source ID 23 emissions to the air pollution control device at any time the dryer temperature is above 100°F and the unit contains solids.

(iv) Maintain the TBP system process under negative pressure, relative to atmospheric pressure when in operation.

[Cond. 14 – 14.3, Construction Permit No. 082CP04 Revision 1, 5/07/04]

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- 12.1 Monitor and record TBP system performance and emissions as follows:
 - a. The TBP system will be considered to be in operation whenever the temperature in the mix tanks, centrifuge, settling tank or dryer (Source ID(s) 19 21 and 23) is greater than 100°F and the source(s) contains tank bottoms. Sources that contain no tank bottoms or are cooler than 100°F may be isolated from the vapor recovery system while Source ID(s) 19 or 20 is in operation;
 - b. Record the times and dates the TBP system (Source ID(s) 19 21) and each boiler in Source ID 18 are in operation;
 - c. Maintain records of the TBP boilers, Source ID 18, adequate to ensure ready identification of unit and unit rating;
 - d. During system operation, record the temperature in each of Source ID(s) 19 21 at least once each hour;
 - e. During system operation, monitor the differential pressure in the affected mix tank or settling tank (Source ID(s) 19 21) continuously, with a pressure measuring device accurate to ± 0.05 " H₂O column, and record the measurement at least once each hour:
 - f. During TBP operations, record the exhaust VOC concentration from each of the air pollution control devices' exhaust (both the carbon beds internal combustion engines) at least once each day the pollution control device operates as determined by a flame ionization detector, photo-ionization detector, or equivalent device using the methods of Section 8 in 40 CFR 60, Appendix A, Method 25A (July 1, 1995 ed.);
 - (i) Calibrate the instrument at least once each week using zero and span gases. The zero gas shall be high purity air and the span gas shall be of no greater than 10,000 ppm (methane equivalent);
 - g. Once every five years, determine analytically the emissions from the solids collected from the tank bottom processing system using the following methods:
 - (i) Collect solid samples from the dryer (Source ID 23) when the dryer is in operation;

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- (ii) Collect the solid samples from the dryer discharge location from the top of the container into which they fall;
- (iii) Place the solid samples in sealed containers with minimized available headspace and packed in ice or dry ice until they are subjected to the flux chamber testing⁷ below;
- (iv) Heat a known volume of solid sample to the dryer discharge temperature and place in the flux chamber;
- (v) Perform the flux chamber testing for a minimum of one hour on each sample; and
- (vi) Determine the VOC emission rate from the solids in terms of pounds of VOC per volume of solids.
- h. Determine the monthly VOC emissions from the tank bottom processing system process by adding the measured emissions from the air pollution control device (flow can be assumed to be either the maximum device exhaust flow rate or the measured rate) to the emissions from the solids as determined during the most recent testing, using consistent units. Adjust the total VOC emissions by adding 0.0006 pounds of VOC per barrel of bottoms processed in the month⁸. Calculate the monthly VOC emission from Source ID 18 using AP 42 emission factors and fuel consumed. Sum the total emissions from each source.
- i. Record the volume of tank bottoms to be processed using either the method described in condition 62 of this permit or the method approved by the Department in accordance with the Department letter dated November 14, 2000.

[Cond. 10.4 & 15, Construction Permit No. 082CP04 Revision 1, 5/07/04] [18 AAC 50.350(d)(1)(D) and 50.350(g) - (h), 5/03/02]

- 12.2 Record, maintain, and submit on request for Department review, the original, or copy of the following:
 - a. field notes, logs, and documentation describing sampling conditions, sampling personnel, analytical method and laboratory;
 - b. laboratory reports describing analytical method, quantification limits, quality assurance and quality control results, and analysis results reported in standard units; and

⁷ This testing protocol is described in a report from HMH Consulting to Alyeska Pipeline dated October 3, 2002.

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⁸ This adjustment accounts for the aldehydes and acrolein expected to be in the engine exhaust – the FID and PID measurement technologies may inadequately account for these compounds.

> c. calculation sheets describing the use of measured flowrates and analyticallydetermined concentrations of volatile organic compounds in estimating mass emission rates. List the methodology used in determining the emission rates.

> > [Cond. 17-17.2 & 17.6, Construction Permit No. 082CP04 Revision 1, 5/07/04] [18 AAC 50.350(d)(1)(D) and 50.350(h) & (i), 5/03/02]

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- 12.3 Attach to the facility operating report under condition 69
 - a. an estimate of TBP VOC emissions for each month with supporting calculation documents; and
 - b. the total volume of tank bottoms from the crude oil storage tanks (Source ID(s) 29-46) processed through the TBP system.

[Cond. 27.1, Construction Permit No. 082CP04, 7/30/03] [Cond. 18, Construction Permit No. 082CP04 Revision 1, 5/07/04]

- 12.4 Report as excess emissions under condition 67
 - (i) if the limit in condition 12 is exceeded; and
 - (ii) if at any time the differential pressure in either of the TBP mixing tanks (Source IDs 19 20) reaches 0.0" H_2O column during operations, or
 - (iii) if a TBP system tank (Source IDs 19 21) has positive pressure relative to atmospheric during operations.

[Cond. 14.4, Construction Permit No. 082CP04 Revision 1, 5/07/04] [18 AAC 50.350(d)(1)(D) and 50.350(i),1/18/97]

13 Permittee may seek Department approval of alternatives to the monitoring, recordkeeping, and reporting requirements for Source ID(s) 17 - 28 by submitting a written request to the Department. Until such time as the Department approves an alternative of a monitoring, recordkeeping, or reporting requirement, the Permittee shall comply with the requirements listed in this permit.

[Cond. 15, Construction Permit No. 082CP04, 7/30/03]

BACT Emissions Limits

- **14 Visible Emissions**. Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from the Source ID(s) 4 6 to reduce visibility through the exhaust effluent by greater than 10 percent for more than three minutes in any one hour.
 - 14.1 Monitor opacity semi-annually in accordance with condition 19 in Section 7.
 - 14.2 Initiate corrective actions within one hour of the time the opacity of emissions from Source ID(s) 4 6 is observed to exceed the opacity limit in condition 14.
 - 14.3 Maintain records of each smoke and each opacity observation and corrective actions initiated pursuant to condition 66 and report as appropriate pursuant to condition 67.

[18 AAC 50.350(d)(1)(D), 1/18/97 and 50.350(g) – (i), 5/03/02] [Exhibit B, AQC Permit 9671-AA001, 6/06/96]

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- 15. Particulate Matter. The Permittee shall not cause or allow particulate matter emission rate from each of Source ID(s) 4 - 6 to exceed 34.4 lbs/hr.
 - 15.1 Burn only no. 1 fuel oil, no. 2 fuel oil, and/or gaseous fuels in Source ID(s) 4 6.
 - 15.2 Record all instances of burning a fuel type other than those referenced in condition 15.1 and report as appropriate pursuant to condition 67.
 - 15.3 Conduct a source test for PM in accordance with Section 12 within 60 days after visibility through the exhaust effluent is observed at greater than 10 percent for more than one hour during normal operations⁹ and the opacity violation is not corrected within the following hour. During source tests, include the parameters required in condition 17.3.

[18 AAC 50.045(c), 50.335(g), 50.350(d)(1(D), 1/18/97 & 50.350(g)-(i), 5/03/02] [Exhibit B, AQC Permit No. 9671-AA001, 6/06/96]

- Sulfur Dioxide. Permittee shall limit the sulfur content of the liquid fuel burned at the facility to no more than 0.50 percent by weight.
 - 16.1 Monitor and keep records in accordance with condition 5.1 and 5.2.
 - 16.2 Report under condition 67 if the sulfur content exceed the limit in condition 16.

[18 AAC 50.350(d)(1)(D), 1/18/97 and 50.350(g) - (i), 5/03/02] [Cond. 8 & Exhibit B, AQC Permit No. 9671-AA001, 6/06/96]

- Oxides of Nitrogen. The Permittee shall not cause or allow nitrogen oxides emitted from 17. Source ID(s) 4 - 6 to exceed 0.40 lbs/MMBtu averaged over three hours.
 - 17.1 Use fuel-staged burners in the Source ID(s) 4 6.
 - 17.2 Conduct a source test for NO_X at normal operating capacity in accordance with Section 12
 - a. by the end of calendar year 2008;
 - b. at the Department's request; or
 - c. whenever any change occurs that could substantially increase the NO_X emission.
 - 17.3 The following parameters must be recorded during any of the source tests on Source ID(s) 4 - 6:
 - Liquid fuel feed rate (gal/hr) a.
 - h. Waste Gas feed rate (scf/hr)

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⁹ "Normal operations" as used in this condition does not include periods during startup, shutdown, maintenance, or malfunction.

- c. Waste Gas heat content (Btu/scf)
- d. Exhaust gas temperature
- e. Combustion Air Flow
- f. Inlet and Outlet VOC concentration (if measurement required by 40 CFR 63)

 $[18 \ AAC \ 50.350(d)(1)(D), \ 1/18/97 \ and \ 50.350(g) - (i), \ 5/03/02] \\ [Exhibits B \& C, \ AQC \ Permit \ No. \ 9671-AA001, \ 6/06/96]$

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Section 7. Visible Emissions and PM Monitoring, Recordkeeping and Reporting

For Source ID(s) 8 – 16

18. The Permittee shall monitor and record the monthly hours of operation when operating on liquid fuel; and report the monthly and the year-to-date summation of operating hours when operating on liquid fuel using the facility operating report in condition 69.

- 18.1 If Source ID(s) 8 16 do not exceed 400 hours of operations per calendar year on liquid fuel, monitoring of compliance for visible emissions and particulate matter is not required. Monitoring shall consist of an annual compliance certification under condition 70 with conditions 3 and 4.
- 18.2 For Source ID(s) 8 16, the liquid fuel monitoring requirements described in conditions 19 and 22 apply to a source that exceeds 400 hours per calendar year operations on liquid fuel.
- 18.3 The Permittee must notify the Department and begin monitoring the affected source according to conditions 19 and 22 no later than 15 days after the end of a calendar month in which the cumulative hours of operation on liquid fuel for the calendar year exceed 400 hours.
- 18.4 Report under condition 67 if the Permittee fails to comply with condition 18.3. [18 AAC 50.346(c) & 50.350(g) (i), 5/03/02]

For Liquid-Fired Sources and Incinerators, Source ID(s) 1 – 6 and 8 - 16

19. Visible Emissions Monitoring. The Permittee shall observe the exhausts of Source ID(s) 1 – 6 and, if triggered, Source IDs 8 - 16 for visible emissions using either the Method 9 Plan under condition 19.1 or the Smoke/No-Smoke Plan under condition 19.2. The Permittee may change visible-emissions plans for a source at any time unless prohibited from doing so by condition 19.3.

[18 AAC 50.350(g), 1/18/97 & 50.346(c), 5/3/02]

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- 19.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.
 - a. <u>First Method 9 Observation.</u> Observe exhaust for 18 minutes within six months after the issue date of this permit or within 14 calendar days after changing from the Smoke/No-Smoke Plan of condition 19.2, whichever is later.
 - b. <u>Monthly Method 9 Observations.</u> After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that a source operates.

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> Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under condition 19.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least semiannually for 18 minutes.

Semiannual observations must be taken between four and seven months after the previous set of observations.

Annual Method 9 Observations. After at least two semiannual 18-minute d. observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, observe emissions at least annually.

Annual observations must be taken between 10 and 13 months after the previous observations and must include at least three 18-minute sets of observations.

- Increased Method 9 Frequency. If a six-minute average opacity is observed e. during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that source to at least monthly intervals, until the criteria in condition 19.1c for semiannual monitoring are met.
- 19.2 Smoke/No Smoke Plan. Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.
 - a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that a source operates.
 - Reduced Monitoring Frequency. After the source has been observed on 30 b. consecutive operating days, if the source operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that a source operates.
 - c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of condition 19.1 or perform the corrective action required under condition 19.3.
- 19.3 Corrective Actions Based on Smoke/No Smoke Observations. If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of condition 19.2, then the Permittee shall either follow the Method 9 plan of condition 19.1 or
 - a. initiate actions to eliminate smoke from the source within 24 hours of the observation:
 - keep a written record of the starting date, the completion date, and a b. description of the actions taken to reduce smoke; and

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- c. after completing the actions required under condition 19.3a,
 - (i) take Smoke/No Smoke observations in accordance with condition 19.2
 - (A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
 - (B) continue as described in condition 19.2b; or
 - (ii) if the actions taken under condition 19.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of condition 19.3c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under condition 19.2a.
- **20. Visible Emissions Recordkeeping.** The Permittee shall keep records in accordance with this condition 20.

[18 AAC 50.350(h) & 50.346(c), 5/3/02]

- 20.1 If using the Method 9 Plan of condition 19.1
 - a. the observer shall record
 - (i) the name of the facility, emissions source and location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 15;
 - (ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;
 - (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
 - (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation in Section 15, and
 - (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;

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b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;

- c. calculate and record the highest 18-consecutive-minute averages observed.
- 20.2 If using the Smoke/No Smoke Plan of condition 19.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:
 - a. the date and time of the observation;
 - b. from Table 1, the ID of the source observed;
 - c. whether visible emissions are present or absent in the exhaust;
 - d. a description of the background to the exhaust during the observation;
 - e. if the source starts operation on the day of the observation, the startup time of the source;
 - f. name and title of the person making the observation; and
 - g. operating rate (load or fuel consumption rate).
- **21. Visible Emissions Reporting.** The Permittee shall report visible emissions as follows: [18 AAC 50.350(i), 1/18/97 & 50.346(c), 5/3/02]
 - 21.1 include in each facility operating report under condition 69
 - a. which visible-emissions plan of condition 19 was used for each source; if more than one plan was used, give the time periods covered by each plan;
 - b. for each source under the Method 9 Plan.
 - (i) copies of the observation results (i.e. opacity observations) for each source that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and
 - (ii) a summary to include:
 - (A) number of days observations were made;
 - (B) highest six-minute average observed; and

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- (C) dates when one or more observed six-minute averages were greater than 20 percent;
- c. for each source under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and
- d. a summary of any monitoring or record keeping required under conditions 19 and 20 that was not done;

21.2 report under condition 67:

- the results of Method 9 observations that exceed an average 20 percent for any a. six-minute period; and
- if any monitoring under condition 19 was not performed when required, report b. within three days of discovering that monitoring was not performed as required.

For Diesel-Fired Engines, Source ID(s) 8 - 16

22. **Particulate Matter Monitoring.** The Permittee shall conduct source tests on Source ID(s) 8 - 16, to determine the concentration of particulate matter (PM) in the exhaust of a source, as follows:

[18 AAC 50.350(g), 1/18/97 & 50.346(c), 5/3/02]

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- 22.1 Within six months of exceeding the criteria of condition 22.2a or 22.2b, either
 - conduct a PM source test according to requirements set out in Section 12; or a.
 - make repairs so that emissions no longer exceed the criteria of condition 22.2; b. to show that emissions are below those criteria, observe emissions as described in condition 19.1 under load conditions comparable to those when the criteria were exceeded.
- 22.2 Conduct the test according to condition 22.1 if
 - 18 consecutive minutes of Method 9 observations result in an 18-minute a. average opacity greater than 20 percent; or
 - for a source with an exhaust stack diameter that is less than 18 inches, 18 b. consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.

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22.3 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.

- 22.4 The automatic PM source test requirement in conditions 22.1 and 22.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.
- **23. Particulate Matter Record Keeping.** Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameter(s) of Source ID(s) 8 through 16. Report the stack diameter(s) in the next operating report under condition 69.

 [18 AAC 50.350(h) & 50.346(c), 5/3/02]
- **24. Particulate Matter Reporting.** The Permittee shall report as follows:

[18 AAC 50.350(i), 1/18/97 & 50.346(c), 5/3/02]

- 24.1 report under condition 67
 - a. the results of any PM source test that exceeds the PM emissions limit; or
 - b. if one of the criteria of condition 22.2 was exceeded and the Permittee did not comply with either condition 22.1a or 22.1b, this must be reported by the day following the day compliance with condition 22.1 was required;
- 24.2 report observations in excess of the threshold of condition 22.2b within 30 days of the end of the month in which the observations occur;
- 24.3 in each facility operating report under condition 69, include
 - a. the dates, Source ID(s), and results when an observed 18-minute average was greater than an applicable threshold in condition 22.2;
 - b. a summary of the results of any PM testing under condition 22; and
 - c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of condition 22.2, if they were not already submitted.

For Power Boilers and Waste Gas Incinerators, Source ID(s) 1-6

- **25. Particulate Matter Monitoring.** The Permittee shall conduct source tests on Source ID(s) 1 6 to determine the concentration of PM in the exhaust of each source, as follows:
 - 25.1 Conduct a PM source test according to the requirements set out in Section 12 no later than 90 calendar days after any time corrective maintenance fails to eliminate visible emissions greater than the 20 percent and 10 percent opacity thresholds in conditions 3 and 14 for two or more 18-minute observations in a consecutive six-month period.

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25.2 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run.

- 25.3 The PM source test requirement in condition 25.1 is waived for an emission unit if:
 - a PM source test during the most recent semiannual reporting period on that a. unit shows compliance with the PM standard since permit issuance, or
 - if a follow-up visible emission observation conducted using Method 9 during b. the 90 days shows that the excess visible emissions described in condition 19.1e no longer occur.

[18 AAC 50.350(g), 1/18/97]

Particulate Matter Recordkeeping. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under conditions 25.1 and 25.2.

[18 AAC 50.350(h), 5/3/02]

- 27. **Particulate Matter Reporting.** The Permittee shall report as follows:
 - 27.1 In each facility operating report required by condition 69, include
 - a. the dates, Source ID(s), and results when an 18-minute opacity observation was greater than the applicable threshold criterion in 19.1e.
 - a summary of the results of any PM testing and visible emissions observations b. conducted under conditions 25.1 and 25.2.
 - 27.2 Report as excess emissions, in accordance with condition 67, any time the results of a source test for PM exceeds the PM emission limit stated in condition 4.

[18 AAC 50.350(i), 1/18/97]

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Section 8. Federal NESHAP Requirements

NESHAP 40 CFR 63 Subparts A and Y, MACT Standards for Marine Vessel Tank Loading Operations, Source ID(s) 1 - 6 and 47 - 50

28. NESHAPs Subpart A General Provisions – The Permittee must comply with the applicable requirements of Subpart A in accordance with the provisions for applicability of Subpart A to Subpart Y in Table 1 of 40 CFR 63.560.

[40 C.F.R. 63 Subpart A and 63.560(c), Subpart Y, 4/05/02] [18 AAC 50.040(c)(1) & (9), 6/01/02 & 50.350(d)(1)(A), 1/18/97]

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29. NESHAPs Subpart Y - Good Air Pollution Control Practice. The Permittee shall comply with the applicable provisions of 40 CFR 63.562(e)(1) – (e)(6).

[40 C.F.R. 63.562(e), Subpart Y, 4/05/02] [18 AAC 50.040(c)(9), 6/01/02 & 50.350(d)(1)(A), 1/18/97]

30. NESHAPs Subpart Y - Construction and Reconstruction Provisions. The Permittee shall fulfill all requirements for construction or reconstruction of an affected source in accordance with the requirements of 40 CFR 63.566.

[40 C.F.R. 63.5, Subpart A & 63.566(a) – (c) and Table 1 of 63.560, Subpart Y, 4/05/02] [18 AAC 50.040(c)(1)(B) & (C), 50.040(c)(9), 6/01/02 & 50.350(d)(1)(A), 1/18/97]

31. NESHAPs Subpart Y MACT Standards. The Permittee shall comply with the MACT and RACT standards for the VMT as provided in 40 C.F.R. 63.562(d).

[40 C.F.R. 63.562(d), Subpart Y, 4/05/02 [18 AAC 50.040(c)(9), 6/01/02 & 50.350(d)(1)(A), 1/18/97]

32. NESHAPs Subpart Y Monitoring, Recordkeeping, and Reporting. The Permittee shall comply with all applicable monitoring, recordkeeping, and reporting requirements of 40 CFR 63 Subpart Y. On or before October 31, 2004, Permittee shall apply for an operating permit revision with proposed replacement conditions specifying the provisions of 40 CFR 63 Subpart Y that apply to the permitted facility, and the emissions units to which they apply.

[40 C.F.R. 63.562, 563, 564, 565, & 567, Subpart Y, 4/05/02] [18 AAC 50.040(c)(1) & (9), 6/01/02, 50.350(d)(1)(A), 1/18/97, & 50.350(g)-(i), 5/3/02]

NESHAP 40 CFR 63 Subparts EEEE, Standards for Organic HAPs emitted from Organic Liquids Distribution (OLD) (non-gasoline)

33. NESHAPs Subpart A General Provisions – The Permittee must comply with the applicable requirements of Subpart A in accordance with the provisions for applicability of Subpart A to Subpart EEEE in Table 12.

[40 C.F.R. 63.1 – 63.15 Subpart A, 4/05/02 and 63.2398 & Table 12, Subpart EEEE, Final Rule issued 8/25/03] [18 AAC 50.040(c)(1), 6/01/02 & 50.350(d)(1)(A), 1/18/97]

34. NESHAPs Subpart EEEE – The Permittee shall comply with the applicable requirements of 40 CFR 63 Subpart EEEE no later than the compliance deadline set out in §63.2342.

[40 CFR 63.2342 - 63.2396 and Tables 1 - 11, Subpart EEEE, Final Rule issued 8/25/03]

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Section 9. Facility-Wide Requirements

35. NESHAPs Applicability Determinations. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b). If a source becomes affected by an applicable subpart of 40 C.F.R. 63, Permittee shall comply with such standard by the compliance date established by the Administrator in the applicable subpart.

35.1 The Permittee must keep a record of the applicability determination on site for a period of 5 years after the determination or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the Permittee believes the source is unaffected. The analysis (or other information) must be sufficiently detailed to allow the Department to make a finding about the source's applicability status with regard to the relevant standard or other requirement.

[40 C.F.R. 63.1(b), 63.6(c)(1) & 63.10(b), 4/05/02] [18 AAC 50.350(h), 5/03/02; 18 AAC 50.040(c)(1)(A) & (E), 6/01/02]

Halon Prohibitions, 40 CFR 82

36. Significant New Alternatives Policy Program. The Permittee shall comply with the prohibitions set out in 40 CFR 82.174(b) through (d) (Protection of Stratospheric Ozone Subpart G – Significant New Alternatives Policy Program), pertaining to substitute products for ozone depleting compounds. Monitoring shall consist of an annual certification that the Permittee complies with these prohibitions.

[40 C.F.R. 82.174 (b) - (d), 7/1/01] [18 AAC 50.040(d), 8/15/02]

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37. Halon Emissions Reduction. The Permittee shall comply with the prohibitions set out in 40 CFR 82.270(b) through (f) (Protection of Stratospheric Ozone Subpart H - Halon Emissions Reduction). Monitoring shall consist of an annual certification that the Permittee complies with these prohibitions.

[40 C.F.R. 82.270 (b) - (f), 7/1/01] [18 AAC 50.040(d), 8/15/02]

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Section 10. Insignificant Sources

This section contains the requirements that the Permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, recordkeeping, and reporting for insignificant sources that the Department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally enforceable requirement.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to these sources.

- For Source ID 18¹⁰ and for sources at the facility that are insignificant as defined in 18 AAC 50.335(q)-(v) that are not listed in this permit, the following apply:
 - 38.1 The Permittee shall submit the compliance certifications of condition 70 based on reasonable inquiry;
 - 38.2 The Permittee shall comply with the requirements of condition 49;
 - 38.3 The Permittee shall report in the operating report required by condition 69 if a source is insignificant because of actual emissions less than the thresholds of 18 AAC 50.335(r) and actual emissions become greater than any of those thresholds;
 - 38.4 No other monitoring, recordkeeping or reporting is required, except as required in conditions 12.a(i), 12.a(ii), 12.1b and 12.1c.

[18 AAC 50.346(b)(1), 5/3/02]

- The Permittee shall not cause or allow visible emissions, excluding condensed water **39.** vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by any of the following:
 - 41.1 more than 20 percent for a total of more than three minutes in any one hour¹¹; [18 AAC 50.050(a)(2) & 50.055(a)(1), 1/18/97] [40 C.F.R. 52.70, 7/01/01]
 - 41.2 more than 20 percent averaged over any six consecutive minutes¹².

[18 AAC 50.050(a) & 50.055(a)(1), 5/3/02]

40. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

¹⁰ Source ID 18 is a group of boilers for Tank Bottom Processing. The boilers are subject to operational limits in conditions 12.a(i) and 12.a(ii) to keep them insignificant under 18 AAC 50.335(r).

¹¹ See Footnote 1.

¹² See Footnote 2.

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41. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

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Section 11. Generally Applicable Requirements

42. Asbestos NESHAP. The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(3), 8/15/02 & 50.350(d)(1)(A), 1/18/97] [40 C.F.R. 61, Subparts A & M, and Appendix A, 7/1/01]

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43. Refrigerant Recycling and Disposal. The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d), 8/15/02 & 50.350(d)(1)(A), 1/18/97] [40 C.F.R. 82, Subpart F, 7/1/01]

- **44. Good Air Pollution Control Practice.** The Permittee shall do the following for Source ID(s) 8 28 and 57 74:
 - a. Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
 - b. Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format;
 - c. Keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030 & 50.346(b)(2), 5/3/02, and 50.350(f)(2) & (3) & 50.350(d)(1)(D) 1/18/97] [Cond. 10, Construction Permit No. 082CP04 Revision 1, 5/07/04]

- **45. Dilution.** The Permittee shall not dilute emissions with air to comply with this permit. [18 AAC 50.045(a), 1/18/97]
- **46. Reasonable Precautions to Prevent Fugitive Dust.** A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

[18 AAC 50.346(c), 5/3/02; 18 AAC 50.045(d) & 50.350(g), 1/18/97

- 48.1 The annual certification of Condition 70 is adequate monitoring and reporting. [18 AAC 50.350(h)-(i), 5/3/02]
- **47. Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the Department.

[18 AAC 50.055(g), 1/18/97]

48. Open Burning. The Permittee shall comply with the following requirements when conducting open burning at the facility.

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48.1 **General Requirements**. Except when conducting open burning under 48.7, 48.8, or 48.9, a person conducting open burning shall comply with the limitations of 48.2 - 48.6 and shall ensure that

- a. the material is kept as dry as possible through the use of a cover or dry storage;
- b. before igniting the burn, non-combustibles are separated to the greatest extent practicable;
- c. natural or artificially induced draft is present;
- d. to the greatest extent practicable, combustibles are separated from grass or peat layer;
- e. combustibles are not allowed to smolder; and
- f. sufficient written records are kept to demonstrate that the Permittee complies with the limitations in this condition. Upon request of the Department, submit copies of the records.
- 48.2 **Black Smoke Prohibited**. Except for firefighter training conducted under 48.8 or 48.9, open burning of asphalts, rubber products, plastics, tars, oils, oily wastes, contaminated oil cleanup materials, or other materials in a way that gives off black smoke is prohibited without written Department approval. Department approval of open burning as an oil spill response countermeasure is subject to the Department's *In Situ Burning Guidelines for Alaska*, adopted by reference in 18 AAC 50.035. Open burning approved under this subsection is subject to the following limitations:
 - a. Open burning of liquid hydrocarbons produced during oil or gas well flow tests may occur only when there are no practical means available to recycle, reuse, or dispose of the fluids in a more environmentally acceptable manner;
 - b. The person who conducts open burning shall establish reasonable procedures to minimize adverse environmental effects and limit the amount of smoke generated; and
 - c. The Department will, in its discretion, as a condition of approval issued under this subsection, require public notice as described in 48.10.
- 48.3 **Toxic and Acid Gases and Particulate Matter Prohibited**. Open burning or incineration of pesticides, halogenated organic compounds, cyanic compounds, or polyurethane products in a way that gives off toxic or acidic gases or particulate matter is prohibited.
- 48.4 **Adverse Effects Prohibited**. Open burning of putrescible garbage, animal carcasses, or petroleum-based materials, including materials contaminated with petroleum or petroleum derivatives, is prohibited if it causes odor or black smoke that has an adverse effect on nearby persons or property.

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48.5 **Air Quality Advisory**. Open burning is prohibited in an area if the Department declares an air quality advisory under 18 AAC 50.245, stating that burning is not permitted in that area for that day.

- 48.6 **Wood Smoke Control Areas**. Open burning is prohibited between November 1 and March 31 in a wood smoke control area identified in 18 AAC 50.025(b).
- 48.7 **Controlled Burning**. Controlled burning to manage forest land, vegetative cover, fisheries, or wildlife habitat, other than burning to combat a natural wildfire, requires written Department approval if the area to be burned exceeds 40 acres yearly. The Department will, in its discretion, require public notice as described in 48.10 of this section.
- 48.8 **Firefighter Training: Structures**. A fire service may open burn structures for firefighter training without ensuring maximum combustion efficiency under the following circumstances:
 - a. Before igniting the structure, the fire service shall
 - (i) obtain Department approval for the location of the proposed firefighter training; approval will be based on whether the proposed open burning is likely to adversely affect public health in the neighborhood of the structure;
 - (ii) visually identify materials in the structure that might contain asbestos, test those materials for asbestos, and remove all materials that contain asbestos;
 - (iii) ensure that the structure does not contain
 - (A) putrescible garbage;
 - (B) electrical batteries;
 - (C) stored chemicals such as fertilizers, pesticides, paints, glues, sealers, tars, solvents, household cleaners, or photographic reagents;
 - (D) stored linoleum, plastics, rubber, tires, or insulated wire;
 - (E) hazardous waste;
 - (F) lead piping;
 - (G) plastic piping with an outside diameter of four inches or more; or
 - (H) urethane or another plastic foam insulation;

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- (iv) provide public notice consistent with 48.10; and
- (v) ensure that a fire-service representative is on-site before igniting the structure;
- b. the fire service shall ignite and conduct training on only one main structure and any number of associated smaller structures at a time; examples of associated smaller structures are garages, sheds, and other outbuildings; and
- c. the fire service shall respond to complaints in accordance with 48.11.
- 48.9 **Firefighter Training: Fuel Burning**. Unless a greater quantity is approved by the Department, a fire service may open burn up to 250 gallons of uncontaminated fuel daily and up to 600 gallons yearly for firefighter training without ensuring maximum combustion efficiency. To conduct this training without prior written Department approval, the fire service shall
 - a. provide public notice consistent with 48.10 before burning more than 20 gallons of uncontaminated fuel, unless waived in writing by the Department; and
 - b. respond to complaints in accordance with 48.11.
- 48.10 **Public Notice**. A person required to provide public notice of open burning shall issue the notice through local news media or by other appropriate means if the area of the open burning does not have local news media. The public notice must be issued as directed by the Department and must
 - a. state the name of the person conducting the burn;
 - b. provide a list of material to be burned;
 - c. provide a telephone number to contact the person conducting the burn before and during the burn;
 - d. for a surprise fire drill, state
 - (i) the address or location of the training; and
 - (ii) the beginning and ending dates of the period during which a surprise fire drill may be conducted (this period may not exceed 30 days); and
 - e. for open burning other than a surprise fire drill, state the expected time, date, and location of the open burning.
- 48.11 **Complaints**. A person required to provide public notice of open burning shall
 - a. make a reasonable effort to respond to complaints received about the burn;

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- keep, for at least 30 days, a record of all complaints received about the burn, b. including to the extent feasible
 - (i) the name, address, and telephone number of each person who complained;
 - (ii) a short summary of each complaint; and
 - (iii) any action the person conducting the open burning took to respond to each complaint; and
- c. upon request, provide the Department with a copy of the records kept under condition 48.11b.

[18 AAC 50.065, 1/18/97 \$ 50.350(g) - (h), 5/3/02]

49. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.346(a)(2), 5/3/02; 18 AAC 50.110, 5/26/72]

- 49.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to condition 67.
- 49.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of condition 49.
- 49.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
 - after an investigation because of a complaint or other reason, the Permittee a. believes that emissions from the facility have caused or are causing a violation of condition 49; or
 - the Department notifies the Permittee that it has found a violation of condition b. 49.
- 49.4 The Permittee shall keep records of
 - the date, time, and nature of all emissions complaints received; a.
 - b. the name of the person or persons that complained, if known;
 - a summary of any investigation, including reasons the Permittee does or does c. not believe the emissions have caused a violation of condition 49; and
 - any corrective actions taken or planned for complaints attributable to emissions d. from the facility.

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49.5 With each facility operating report under condition 69, the Permittee shall include a brief summary report which must include

- a. the number of complaints received;
- b. the number of times the Permittee or the Department found corrective action necessary;
- c. the number of times action was taken on a complaint within 24 hours; and
- d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.
- 49.6 The Permittee shall notify the Department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.346(a)(2) & 50.350(g) - (i), 5/3/02]

50. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard¹³, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under condition 67 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under condition 67.

[18 AAC 50.235(a) & 50.350(f)(3), 1/18/97]

- 51. HAP Reconstruction. Before replacing components of either a "major source" as that term is defined in 40 C.F.R. 63.2 or a source that would become a "major source" as a result of replacement, where the cost of replacement exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source, but does not exceed 50 percent of the fixed capital cost that would be required to construct the entire facility, the Permittee shall obtain written approval from the Department:
 - 51.1 under 40 C.F.R. 63.5(b)(3), (d), and (e), if the source is subject to an emission standard of 40 C.F.R. 63, adopted by reference in 18 AAC 50.040(c)(1)(C), or
 - 51.2 in a Notice of MACT Approval under 40 C.F.R. 63.43(f) (h), if the source is subject to 40 C.F.R. 63.43(a), each adopted in reference by 18 AAC 50.040(c).

[18 AAC 50.346(d), 5/3/02]

Permit Renewal. To renew this permit, the Permittee shall submit an application under 18 AAC 50.335 no sooner than **June 30, 2007** and no later than **June 30, 2008**.

[18 AAC 50.335(a), 1/18/97]

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¹³ Technology-based emission standard means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

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Section 12. General Source Testing and Monitoring Requirements

53. Requested Source Tests. In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 1/18/97 & 18 AAC 50.345(a) & (k), 5/3/02]

54. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b) & 50.350(g), 1/18/97]

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- 54.1 at a point or points that characterize the actual discharge into the ambient air; and
- 54.2 at the maximum rated burning or operating capacity of the source or another rate determined by the Department to characterize the actual discharge into the ambient air.
- **55. Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:
 - 55.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 6/1/02; 18 AAC 50.220(c)(1)(C) & 50.350(g), 1/18/97] [40 C.F.R. 63, 4/5/02]

55.2 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9 and may use the form in Section 15 to record data.

[18 AAC 50.030, 5/3/02, 18 AAC 50.220(c)(1)(D) & 50.350(g), 1/18/97]

55.3 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(4), 8/15/02 & 18 AAC 50.220(c)(1)(E) & 50.350(g), 1/18/97] [40 C.F.R. 60, Appendix A, 7/1/01]

55.4 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2), 7/2/00; 18 AAC 50.220(c)(1)(F) & 50.350(g), 1/18/97] [40 C.F.R. 51, Appendix M, 7/1/99]

55.5 Source testing for emissions of any contaminant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(19), 6/1/02 & 18 AAC 50.220(c)(2) & 50.350(g), 1/18/97] [40 C.F.R. 63, Appendix A, Method 301, 4/5/02]

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56. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 18 AAC 50.350(g), 1/18/97 & 18 AAC 50.990(88), 5/3/02]

57. **Test Exemption.** The Permittee is not required to comply with conditions 59, 60 and 61 when the exhaust is observed for visible emissions by Method 9 Plan (condition 19.1) or Smoke/No Smoke Plan (condition 19.2)

[18 AAC 50.345(a), 5/3/02]

58. Test Deadline Extension. The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l), 5/3/02]

59. Test Plans. Except as provided in condition 57, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under condition 53 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18 AAC 50.345(a) & (m), 5/3/02]

60. Test Notification. Except as provided in condition 57, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n), 5/3/02]

61. **Test Reports.** Except as provided in condition 57, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the Source Test Report Outline, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in condition 63. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o), 5/3/02]

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62. Tank Bottom Solids Measurement Description. Previous surveys of the steel floor of the crude tank, including detail on the slope of the steel floor in the tank, are stored as AutoCAD files in X, Y, Z coordinates. Inside the storage tank each of the sixty-one 24-inch diameter pipe columns will be numbered. The design location of each column will be used to establish a known X and Y coordinate. Alyeska will take a depth reading two feet North of each column and the measurements of the bottom solids will be identified by column number. The top of the bottom solids is the Z dimension. Alyeska will also measure the bottom solids depth at known locations on the tank wall such as the inlet pipe and mixer motor hatches. After all the field data is collected Alyeska will use the commercially available off-the-shelf software, "AutoCad version 14" and "Softdesk 8 Civil/Survey" to manage the field data. AutoCad version 14 will be used to compute the X, Y, & Z values of each point where the bottom solids are measured. The Digital Terrain Model in Softdesk 8 Civil/Survey will be used for volume computations based on the X,Y & Z data. Alyeska will plot the surface of the residual solids as a check on the validity of the measurement data.

[Exhibit B, Construction Permit No. 082CP04 Revision 1, 5/07/04] [18 AAC 50.350(d)(1)(D), 1/18/97]

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Section 13. General Recordkeeping, Reporting, and Compliance Certification Requirements

63. Certification. The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. When certifying a compliance certification, the official's signature must be notarized.

[18 AAC 50.205 and 50.350(b)(3) & (j), 1/18/97; and 18 AAC 50.345(a) & (j), 5/3/02]

64. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send two copies of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with condition 63.

[18 AAC 50.350(i), 1/18/97]

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65. Information Requests. The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200 & 50.350(b)(3), 1/18/97; and 18 AAC 50.345(a) & (i) & 50.350(g) – (i), 5/3/02]

- **Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:
 - 66.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
 - 66.2 records of all monitoring required by this permit, and information about the monitoring including:
 - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
 - b. sampling dates and times of sampling or measurements;
 - c. the operating conditions that existed at the time of sampling or measurement;
 - d. the date analyses were performed;

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- e. the location where samples were taken;
- f. the company or entity that performed the sampling and analyses;
- g. the analytical techniques or methods used in the analyses; and
- h. the results of the analyses.

[18 ACC 50.350(h), 5/3/02]

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67. Excess Emissions and Permit Deviation Reports.

- 67.1 Except as provided in condition 49, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:
 - a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the Permittee believes to be unavoidable;
 - b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;
 - c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in conditions 67.1c(ii) and 67.1c(iii);
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under condition 67.1c(i); and
 - (iii) for failure to monitor, as required in other applicable conditions of this permit.
- 67.2 When reporting excess emissions, the Permittee must report using either the Department's on-line form, which can be found at http://www.state.ak.us/dec/dawq/aqm/eeform.pdf, or if the Permittee prefers, the form contained in Section 17 of this permit. The Permittee must provide all information called for by the form that is used.

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67.3 When reporting a permit deviation, the Permittee must report using either the Department's on-line form, which can be found at http://www.state.ak.us/dec/dawq/aqm/eeform.pdf, or if the Permittee prefers, the form contained in Section 17 of this permit. The Permittee must provide all information called for by the form.

67.4 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), & 50.350(i), 1/18/97; and 18 AAC 50.346(a)(3), 5/3/02

- 68. **NSPS and NESHAP Reports.** The Permittee shall:
 - 68.1 attach to the facility operating report required by condition 69, copies of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and
 - 68.2 upon request by the Department, notify and provide a written copy of any EPAgranted waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules.

[18 AAC 50.040, 8/15/02 & 18 AAC 350(i)(2), 1/18/97] [40 C.F.R. 60, 7/01/01&. 40 C.F.R. 63, 4/05/02]

- 69. **Operating Reports.** During the life of this permit, the Permittee shall submit to the Department one original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.
 - 69.1 The operating report must include all information required to be in operating reports by other conditions of this permit.
 - 69.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 69.1, either
 - The Permittee shall identify a.
 - (i) the date of the deviation;
 - (ii) the equipment involved;
 - (iii) the permit condition affected;
 - (iv) a description of the excess emissions or permit deviation; and
 - any corrective action or preventive measures taken and the date of such (v) actions; or
 - b. When excess emissions or permit deviations have already been reported under condition 67 the Permittee may cite the date or dates of those reports.

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The operating report must include a listing of emissions monitored under condition 19 69.3 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

- the date of the emissions; a.
- b. the equipment involved;
- the permit condition affected; and c.
- d. the monitoring result which triggered the additional monitoring. [18 AAC 50.346(b)(3), 5/3/02; 18 AAC 50.350(d)(4), 6/21/98 and 18 AAC 50.350(f)(3) & (i), 1/18/97]
- **Annual Compliance Certification.** Each year by March 31, the Permittee shall compile **70.** and submit to the Department one original and one copy of an annual compliance certification report as follows:

[18 AAC 50.350(j), 1/18/97]

- 70.1 For each permit term and condition set forth in Section 4 through Section 13, including terms and conditions for monitoring, reporting, and recordkeeping [18 AAC 50.350(d)(4), 6/21/98]
 - certify the compliance status over the preceding calendar year consistent with a. the monitoring required by this permit;
 - b. state whether compliance is intermittent or continuous;
 - briefly describe each method used to determine the compliance status; and c.
 - d. notarize the responsible official's signature.

[18 AAC 50.205, 1/18/97 & 50.345(a) & (j), 5/3/02]

70.2 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350(j), 1/18/97]

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Section 14. Standard Conditions Not Otherwise Included in the Permit

- 71. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for
 - 71.1 an enforcement action;
 - 71.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - 71.3 denial of an operating-permit renewal application.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (c), 5/3/02]

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72. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (d), 5/3/02]

Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (e), 5/3/02]

- Compliance with permit terms and conditions is considered to be compliance with those **74.** requirements that are
 - 74.1 included and specifically identified in the permit; or
 - 74.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (b), 5/3/02]

75. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (f), 5/3/02]

- **76.** The permit does not convey any property rights of any sort, nor any exclusive privilege. [18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (g), 5/3/02]
- 77. The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to
 - 77.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

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- 77.2 have access to and copy any records required by the permit;
- 77.3 inspect any facility, equipment, practices, or operations regulated by or referenced in the permit; and
- 77.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (h), 5/3/02]

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Section 15. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observ	ver:				
Company & Facility:			Stack with Plume Sun	SOURCE L	AYOUT SKETCH Draw North Arrow
Location:			 Wind —	x 	Emission Point
Test No.:		Date:			
	Source:				
Production Rate/O	perating Rate:			146	Observers Position
Unit Op	erating Hours:				
Hrs. o	of observation:			Sun Loc	cation Line

Clock Time	Initial		Final
Observer location Distance to discharge			
Direction from discharge			
Height of observer point			
Background description			
Weather conditions Wind Direction			
Wind speed			
Ambient Temperature			
Relative humidity			
Sky conditions: (clear, overcast, % clouds, etc.)			
Plume description: Color			
Distance visible			
Water droplet plume? (Attached or detached?)			
Other information			

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Visible Emissions Observation Record Page ___ of ___ Company & Facility _____ Certified Observer____ Test Number Clock time_ Date: Steam Plume Visibility reduction every 15 Seconds (Opacity) (check if applicable) Comments Hr Min 0 15 30 45 Attached Detached Additional information: Observer Signature and Date Certified By and Date **Data Reduction:** Duration of Observation Period (minutes) Duration Required by Permit (minutes)_ Highest Six –Minute Average Opacity (%)_____ Number of Observations _____ Number of Observations exceeding 20 % In compliance with three-minute aggregate opacity limit? (Yes or No) _____ In compliance with six-minute opacity limit? (Yes or No) _____ **Average Opacity Summary** Time Set Opacity Start—End Number Sum Average

Section 16. SO₂ Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO₂ using the following equations:

A = 31,200 x [wt%
$$S_{fuel}$$
] = 31,200 x ____ = ____
B = 0.148 x [wt% S_{fuel}] = 0.148 x ____ = ____

$$C = 0.396 \times [wt\%C_{fuel}] = 0.396 \times ___ = ____$$

D =
$$0.933 \times [wt\%H_{fuel}] = 0.933 \times$$
 = _____ = ____

$$F = 20.9 - [vol\%_{dry}O_{2, exhaust}] = 20.9 - ___ = ____$$

$$G = [vol\%_{dry}O_{2, exhaust}] \div F = ____ \div ___ = _____$$

$$H = 1 + G = 1 +$$
____ = ___

$$SO_2$$
 concentration = A ÷ I = ____ ÷ ___ = ___ ppm

The wt% S_{fuel} , wt% C_{fuel} , and wt% H_{fuel} are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to condition 5.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust ($vol\%_{dry}O_{2,\,exhaust}$) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if $\mathbf{wt\%S_{fuel}} = 1.0\%$, then enter 1.0 into the equations, not 0.01, and if $\mathbf{vol\%_{dry}O_{2,\,exhaust}} = 3.00\%$, then enter 3.00, not 0.03.

[18 AAC 50.346(c), 5/3/02]

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Fax this	form to: (907)	269-7508 Tel	ephone: (907) 2	69-8888
ny Name				
Marine Terminal				
Name	_			
on for notificat		041 Day 1-41	(. O
cess Emissio		Other Deviation		t Condition
it section 1		you checked the Il out section 2	12 DOX	
it section i	111	Tout Section 2		
did you discov	er the Excess	Emissions or Ot	her Deviation:	
Date://				
on 1. Excess I	Emissions			
/ \ =	4. (1.1	041		
(a) Event Info		24-hour clock): T Time:	END Time:	Duration
	(hr:min		END Time.	Duration
Date:	,		<u></u> :	_ ::
Date:			<u>:</u>	: <u>;</u>
	-		Total:	
(b) Cause of	Event (Check	all that apply):		
START UP	UPSET	CONDITION		NTROL EQUIPMENT
☐ SHUT DOWN		ULED MAINTENAI		HER
	description of wh	at happened, includ	ding the paramete	rs or operating conditions
Attach a detailed exceeded.				
	nvolved:			
exceeded. (c) Sources I Identify each emi	ission source invo			ntification number and
(c) Sources I Identify each emname as in the p	ission source invo ermit. List any co			ntification number and ected by the event. Attacl
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(e) Excess Emission Reduction:Attach a description of the measures taken to minimize and/or control emissions during the event.

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(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(b) Permit Condition Deviation: Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary. Permit Condition Potential Deviation (c) Corrective Actions: Attach a description of actions taken to correct the deviation or potential deviation and to prevene recurrence.	Identify each name as in th additional she	e permit. List any con eets as necessary.		e identification number and n affected by the event. Attach Control Device
Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary. Permit Condition Potential Deviation (c) Corrective Actions: Attach a description of actions taken to correct the deviation or potential deviation and to preve		- Jource Name		
Attach a description of actions taken to correct the deviation or potential deviation and to preve		IUI	Potential Deviation	
	Àttach a desc		n to correct the deviation or pote	ential deviation and to prevent
sed on information and belief formed after reasonable inquiry, I certify that the statements and ormation in and attached to this document are true, accurate, and complete.				

Alaska Department of Environmental Conservation

Air Permits Program

October 15, 2003

Alyeska Pipeline Service Company

Valdez Marine Terminal

STATEMENT OF BASIS

of the terms and conditions for

Permit No. 082TVP01

Prepared by Jack Coutts, Zeena Siddeek,

Tom Turner, Grace Germain

Significant Revision 1 by Grace M. Germain

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. 082TVP01.

FACILITY IDENTIFICATION

Section 1 of Operating Permit No. 082TVP01 contains information on the facility as provided in the Title V permit application.

The Valdez Marine Terminal is operated by Alyeska Pipeline Service Company and Alyeska Pipeline Service Company is the Permittee for the facility's operating permit. The SIC code for this facility is 4491 - Marine Cargo Handling.

The facility primarily engages in the loading of crude oil onto marine vessels either directly from the Trans-Alaska Pipeline or from one or more of 18 crude oil storage tanks. The facility's primary activities are conducted using the 18 crude oil storage tanks and 2 active marine vesselloading berths. The facility also engages in several activities that support the primary function including power generation, vapor collection and destruction, miscellaneous maintenance, waste incineration, fire-fighter training, ballast and industrial wastewater treatment, site remediation, tank cleaning, and other activities commonly found at large industrial facilities.

SOURCE INVENTORY AND DESCRIPTION

Table 1 of Operating Permit No. 082TVP01 contains information on the sources regulated by this permit, as provided in the application. The table is provided for informational and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

Section 2 of Operating Permit No. 082TVP01 contains emission information as provided in the Title V application. A summary of the potential to emit (PTE)¹⁴ and assessable PTE as determined in the 2002 Environmental Impact Statement for the Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way for the Valdez Marine Terminal as shown in the table below. Potential annual emission rates for combustion sources were calculated based on maximum allowable annual fuel used rates and tested sources or EPA's AP-42 emission factors (EPA 2001a).

Table A - Emissions Summary, in Tons Per Year (TPY)

Pollutant	NO_X	СО	PM-10	SO_2	VOC	HAPs	Total
PTE	1578	137	278	1757	3464	123	7214
Assessable PTE	1578	137	278	1757	3464	123	7214

¹⁴ Potential to Emit or PTE means the maximum quantity of a release of an air contaminant, considering a facility's physical or operational design, based on continual operation of all sources within the facility for 24 hours a day, 365 days a year, reduced by the effect of pollution control equipment and approved state or federal limitations on the capacity of the facility's sources or the facility to emit an air contaminant, including limitations such as restrictions on hours or rates of operation and type or amount of material combusted, stored, or processed as defined in AS 46.14.990(21), effective 1/18/97.

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The assessable PTE listed under condition 1.1 is the sum of the emissions of each individual regulated air contaminant for which the facility has the potential to emit quantities greater than 10 TPY. The emissions listed in Table A are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the facility.

BASIS FOR REQUIRING AN OPERATING PERMIT

Section 2 of Operating Permit No. 082TVP01 lists the regulatory classifications of the Valdez Marine Terminal.

This facility is classified as an ambient air quality facility as defined in 18 AAC 50.300(b)(2) and (b)(3) because it is a facility containing a fuel-burning equipment with a rated capacity of 100 MMBtu/hr or more, and incinerators with a total combined rated capacity of 1,000 pounds per hour or more. It is also classified as a Prevention of Significant Deterioration (PSD) Major Facility as defined in 18 AAC 50.300(c)(1) because it emits or has the potential to emit 250 tons per year or more of a regulated contaminant in an area designated attainment or unclassifiable for that air contaminant. Likewise, it is classified as a PSD Major Facility under 18 AAC 50.300(c)(2)(W) because it emits or has the potential to emit 100 tons per year or more of a regulated contaminant in an area designated attainment or unclassifiable for that air contaminant and is a petroleum storage and transfer unit with a total storage capacity exceeding 300,000 barrels. It is classified as a Hazardous air Contaminant (HAC) major facility as defined in 18 AAC 50.300(f) because it emits or has the potential to emit 10 tons per year or more of a single HAC or 25 tons per year or more of combined HACs.

This facility requires an operating permit under:

- 18 AAC 50.325(b)(1) because it emits 100 TPY or more of a regulated pollutant;
- 18 AAC 50.325(b)(2) because it has the potential to emit 10 TPY or more of a hazardous air contaminant or 25 TPY or more in the aggregate of two or more hazardous air contaminants;
- 18 AAC 50.325(b)(3) because it contains sources subject to the standards adopted by reference in 18 AAC 50.040(a); and
- 18 AAC 50.325(c) because it is within the category of facilities subject to AS 46.14.130(b)(4).

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to Valdez Marine Terminal, the state regulations require a description of:

- Each incinerator, including a demonstration showing each requirement in \Rightarrow 18 AAC 50.050, Incinerator Emissions Standards, that applies, under 18 AAC 50.335(e)(4)(A);
- \Rightarrow Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under 18 AAC 50.335(e)(4)(C);

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⇒ Each source subject to a standard adopted by reference in 18 AAC 50.040 under 18 AAC 50.335(e)(2); and

 \Rightarrow Sources subject to requirements in an existing Department permit 18 AAC 50.335(e)(5).

The emission sources at Valdez Marine Terminal classified as "regulated sources" according to the above Department regulations are listed in Table 1 of Operating Permit No. 082TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The most recent permit issued for this facility is Permit to Operate No. 9671-AA001. This permit-to-operate includes all construction authorizations issued through June 6, 1996, since it was issued before January 18, 1997. A permit hygiene request for revisions pertaining to conditions in the AQC Permit to Operate No. 9671-AA001 was processed and approved through Construction Permit No. 082CP05, issued September 25, 2003. All facility-specific requirements established in the previous operating permit and as revised in Construction Permit No. 082CP05 are included in the new operating permit as described in Table B.

Construction Permits

Construction Permit No. 082CP04, which rescinds Construction Permit No. 0071-AC005, was issued to this facility on July 30, 2003. The facility-specific requirements established in this construction permit are either incorporated or subsumed in the new operating permit as described in Table C.

Title V Operating Permit Application History

The Permittee submitted an application on October 7, 1997.

The Permittee amended this application on December 17, 1997 and on March 17, 2003.

Additional information was received after August 1999.

Title V Operating Permit Revision History

The Department has issued Air Quality Operating Permit No. 082TVP01 Significant Revision 1 on summarized as follows:

- 1. an administrative revision requested in APSC Letter No. 762 dated March 19, 2004 to correct a typographical error in condition 17.3(g).
- 2. a minor revision requested in APSC Letter No. 1141 dated May 19, 2004 to update facility identification information and to reflect modifications made in Construction Permit No 082CP04 Revision 1, issued May 7, 2004;

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- 3. a significant revision requested in APSC Letter No 1513 dated August 23, 2004 to remove the semi-annual testing for H₂S content in representative waste gas samples required in condition 5.5;
- 4. the revisions requested in APSC Notification Letter No. 1874, October 4, 2004 regarding removal of Source ID 7, the Solid Waste Incinerator, and its associated requirements from 082TVP01;
- 5. the revisions required to reflect the partial agreement signed on June 18, 2004 between APSC and the Department on several conditions appealed by APSC in Operating Permit No. 082TVP01 issued November 28, 2003; and
- 6. other typographical and minor edits found throughout the document as detailed in Table B below.

Details of these revisions are itemized in Table B below.

Table B – Summary of changes made to 082TVP01 issued November 28, 2003 as revised in 082TVP01 Revision 1 issued:

Permit No. 082TVP01 (11/28/03)	How condition was revised	Reason for revision
Condition Number		
Section 1, Identification	Changed addresses and Fee Contact	Updated information per APSC revision request
	information, as requested.	Letter No. 1141 dated May 19, 2004.
Section 3, Source	Removed Source ID 7 (solid waste	APSC chose to shutdown and remove Source ID
Inventory and conditions 9,	incinerator) and 51 – 56 (crude and fuel	7 from VMT as a means of complying with 40
19 and 46 (now 44)	oil tanks)	CFR 62 Subpart III (CISWI rules). (APSC
		Letter No. 1874. October 4, 2004).
		Per partial agreement signed June 18, 2004,
		Permittee has demonstrated through calculations using EPA AP-42 Tank 4.0 that the regulated air
		pollutants potential emissions from each Source
		IDs 51 – 56 do not trigger classification as a
		significant source and need not be included in
		operating permit. [18 AAC 50.335(q)]
5.5a	Removed the requirement for	Significant revision requested in APSC Letter
	semiannual testing for H ₂ S content in	No 1513 dated August 23, 2004 and Partial
	waste gas burned in Source IDs 1-3.	Agreement signed June 18, 2004 – APSC
		demonstrated compliance with SO ₂ emission
		standard through H ₂ S analyses performed on
		June 23, 2004 for the waste gas burned in
		Source IDs 1-3. (See statement of basis (SOB)
5.7b	Removed the condition.	for condition 5 below.)
3.70	Removed the condition.	Requirement already fulfilled for the life of this permit upon submittal of H ₂ S analytical results
		with the 1st half 2004 Facility Operating Report.
		(See SOB for condition 5 below.)
6.a	Replaced "visible emissions from	To correct typographical error. The SOB for
	marine vessels" with "visibility".	condition 6 was amended accordingly.
Footnote 4	Added the phrase "while or	To clarify the period at which "initial startup" is

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Permit No. 082TVP01 (11/28/03) Condition Number	How condition was revised	Reason for revision
	immediately after the loading and unloading operations".	applied in condition 6.a(ii).
8.7a & 8.7b	Replaced the words "number of actual hours of operation in that month" to "number of hours in that month".	Partial Agreement signed June 18, 2004 – to correct the formula in calculating the average monthly combined heat input of the power boilers (Source IDs 1-3) and the waste gas incinerators (Source IDs 4-5). The combined heat input limits for Source IDs 1-3 and 4-6 in Table 2 are based on a monthly average assuming unlimited operational hours. Therefore the total number of hours in the month (not the actual hours of operation) should be used to correctly calculate for the sources combined (Source IDs 1-3 or 4-6) average heat input for that month in MMBtu/hr.
10 - 12	Changed the conditions and included appropriate citations to match the revisions made in Construction Permit 084CP04 Rev.1 issued May 7, 2004.	Minor revision requested in APSC Letter No. 1141 dated May 19, 2004. The revisions were made to remove the requirement to capture and destroy working loss vapors from the mixing tank of the tank processing (TBP) system. The nominal amount of VOC (0.36 tpy) for two tanks) generated and captured during filling of the tanks does not justify the effort and technical difficulties encountered in complying with the requirement. The SOB for condition 12 was amended accordingly.
17.2 & 17.2a	Replaced the requirement to conduct NO _x source tests on waste gas incinerators at "maximum rated capacity" to "normal operating capacity"; and "within 180 days of permit issuance" to "by the end of calendar year 2008.	Minor revision requested in APSC Letter No. 1141 dated May 19, 2004 and Partial Agreement signed June 18, 2004. APSC anticipates decommissioning the waste gas incinerators before expiration of this permit. The Department agrees to postpone the source testing by the end of 2008 (permit expiration) if the waste gas incinerators are still operating at that time.
17.3f and 17.3g	Added the phrase "(if measurement required by 40 CFR 63)" in 17.3g (now 17.3f) and removed 17.3f as set out in Permit No 9671-AA001, where the requirement originated from.	Typographical errors in 082TVP01. Administrative revision requested in APSC Letter No. 762 dated March 19, 2004 to correct typographical error in 17.3g (now 17.3f). The Department also removed condition 17.3f ("Exhaust gas CO ₂) as this was not required in Permit No. 9671-AA001; removal of this requirement is inconsequential.
19	Added the words "Source ID(s) $1 - 6$ and, if triggered, Source IDs $8 - 16$ ".	To clarify applicability of the condition to specific sources. Previous language in condition 19 did not specify that the VE monitoring requirement for Source IDs 8-16 is required only if triggered, i.e.; to reiterate the 400-hour trigger in condition 18.2.
20.2g	Added the requirement to record "operating rate (load or fuel consumption rate)".	A record required in the standard condition that was missed in 082TVP01, 11/28/03.

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Permit No. How condition was revised Reason for revision 082TVP01 (11/28/03) **Condition Number** 21.2b Changed the time allowed to report APSC requested this revision during review of failure to monitor when required. the draft revision, for practical reasons. One can Changed as follows: "report within not report a failure to comply with a requirement three days of the date discovering the until it is discovered. that monitoring was not performed as required". 23 Changed "Source IDs 30-38" with To correct typographical error. Sources affected "Source IDs 8-16". are Source IDs 8-16. 25.1 Added the words "and 10 percent To clarify the opacity thresholds of sources opacity thresholds in conditions 3 and affected. 28 and 29 Removed the requirements for 40 CFR APSC has shutdown Source ID 7 since 9/11/04, 62 Subparts HHH (HMIWI) and III does not intend to repair or restart the unit, and will remove from its current location by the end (CISWI). of the year. Shutting down the incinerator is APSC's means of complying with 40 CFR 62 Subparts III (CISWI rules). (APSC Letter No. 1874, October 4, 2004) 31 & 34 Replaced language in conditions 31 & Partial Agreement signed June 18, 2004 as 34 (now 29 & 32) with general interim measures while a more detailed statements to refer the applicability of statement of applicable requirements is 40 CFR 63 Subpart Y to the facility. developed by APSC and the Department. (For details, see amended SOB for conditions 30 – 34 below.) 36 Removed the sentence in condition 36 Partial Agreement signed June 18, 2004. After issuance of 082TVP01, EPA has accepted (now 34)"The affected sources are the crude oil storage tanks, Source ID(s) 29 petitions to reconsider Subpart EEEE which may - 46, and all transfer racks, equipment result in re-issuance of Subpart EEEE at some leak components, and transport future date. At that time, it would be more vehicles associated in the storing, appropriate to amend the conditions to loading and unloading of organic incorporate specific applicable requirements liquids, except as excluded in from that rule. §§63.2338(c)(1) -(c)(4)." 64 citation Replaced condition 64 (now 62) with To update with appropriate citation. appropriate citation from 082CP04 Revision 1.

COMPLIANCE HISTORY

The facility has operated at its current location since 1975. Review of the permit files for this facility, which includes the past inspection reports indicate a facility generally operating in compliance with its air permits.

FACILITY-SPECIFIC REQUIREMENTS CARRIED FORWARD

State of Alaska regulations in 18 AAC 50.350(d)(1)(D) require that an operating permit include each facility-specific requirement established in a prior construction permit and/or permit issued under the former 18 AAC 50.400. Tables B and C below list the permit condition that established requirements in AQC Permit to Operate No. 9671-AA001, as amended in Construction Permit

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No. 082CP05, and in Construction Permit No. 082CP04 Revision 1_as well as the new condition in Operating Permit No. 082TVP01 that carries the old requirements into the new permit.

Table C - Comparison of Pre-January 18, 1997 Permit-to-Operate No. 9671-AA001 Conditions, as amended in 082CP05 issued September 25, 2003, to Operating Permit No. 082TVP01 Conditions¹⁵

Permit No. 9671-AA001 Condition Number	Description of Requirement	Permit No. 082TVP01 Condition Number	How condition was revised
Exhibit A	Source Inventory	Section 3	Updated list based on new information from most recent construction permits. Removed insignificant sources.
2 and Exhibit B	Limits & Standards	3 - 5, 7 - 10, 14 - 17 and Table 2	These limitations have been carried in the operating permit conditions based on the current applicable SIP standards and construction permit Nos. 082CP04 & 082CP05. All limits and standards marked as "enforceable limits" and the NOx and PM limits (BACT limits which were not marked "enforceable") are carried into this permit, except as rescinded or revised in 082CP05. All others are eliminated since they are not standards or limits.
3	Permittee shall, at all times, including startup,install, maintain, and operate each source,in a manner consistent with safety and good air pollution control practices for minimizing emissions.	29 and 44	Replaced with the State standard and NESHAP Subpart Y "good air pollution control practices" conditions.
4	Permittee shall reduce as much as practicable the emission of air contaminants during all periods of excess emissions	50 and 67	Replaced with the standard conditions for Technology-Based Emission Standard and Excess Emissions and Permit Deviation Reports.
5	MACT Subpart Y Compliance	28 - 32	Carried applicable NESHAP Subparts A & Y requirements by reference.
6	Modification notification requirement for all fuel burning equipment, solid waste incinerator, and hydrocarbon vapor sources.	51	Replaced with the standard condition for HAP reconstruction approval requirement specifically for hazardous air contaminant facilities.
7 and Exhibit B (item A)	Fuel use restriction	8 and Table 2	Removed the 3,846-gallons/hour limit for fuel combusted in Source ID(s) 1 - 3. The heat-input limit (in MMBtu/hr) is sufficient to carry out compliance monitoring. Added MR&R requirements.
8 and Exhibit B (item C)	Fuel sulfur content limit	16	No change. Provided MR&R requirements.
9, Exhibit B (item A) and	Generator/firewater pump operational hour limits for	9 and Table 2	Same operational hour limits. Provided MR&R requirements based on a consecutive 12-month period.

¹⁵ This table does not include all standard and general conditions, except as specified in Table C.

D 1137	D 1 11 6	D 1037	** 11.1
Permit No.	Description of	Permit No.	How condition was revised
9671-AA001	Requirement	082TVP01	
Condition		Condition	
Number		Number	
Exhibit D (item 4)	non-emergency use		
10	Provide the Department annually a list of crude oil storage tanks to be cleaned and inspected during the calendar year and associated emissions	None	Rescinded in 082CP05. Condition duplicates the reporting requirements for storage tanks routine maintenance activities under the Oil Discharge and Contingency Plan (c-plan) covered by 18 AAC 75.
11	Collect all excess vapors from the crude storage tanks	10.1	Carried forward as revised in 082CP05.
12 and Exhibit B (item A.vi).	The venting of vapors to the atmosphere from the crude oil storage farm shall not exceed 850 minutes in any 12 consecutive months, except due to routine maintenance, emergency repairs, unavoidable upsets	10 & 10.5	Rescinded in 082CP05. Removed the 850-minute venting allowance. Replaced with requirements to avoid venting and report as excess emissions any venting to the atmosphere.
13	Crude Oil Storage Tank Vapor Control Requirement – operate according to BOMP	10.4	No Change.
14	Marine Vessel operations requirement – cease loading and unloading operations on any vessel berthed after an opacity violation	6.3b & 6.3c	Rescinded in 082CP05. Loading and unloading activities does not necessarily cause the opacity violations. Excess emissions reporting and notification of the Valdez Marine Terminal Oversight Unit (VMTOU) required in 082 CP05 as carried forward in conditions 6.3b and 6.3c are more appropriate steps to address the violation.
15	Marine Vessel monitoring for visible emissions	6	Revised to reflect the requirements in 18 AAC 50.070. Added specific MR&R requirements.
16	Source test requirement for the Tanker Vapor Collection System	None	Requirement already fulfilled. Rescinded in 082CP05.
22 and Exhibit C	Continuous emissions & process monitoring routine analyses and maintenance requirements	5.1, 5.2, 8.1 - 8.7, 10.2, 10.3, & 17.3	Carried forward as revised in 082CP05. Same requirements, different format. Changed the frequency for distillate fuel sulfur content analysis from quarterly to each shipment, as required in the standard condition language adopted 5/3/02. Allowed the use of an alternative monitoring instrument or methodology for waste gas heat content, subject to the Department's approval.
23 and Exhibit C	Required use of Transmissometers in Source ID(s) 1 - 3	None	Condition rescinded in 082CP05. Source ID(s) 1 - 3 were determined not subject to NSPS Subpart D per EPA letter dated 7/29/03.
24 and Exhibits C and D (item 5)	Sulfur content monitoring and reporting for fuel oil contained in tanks 52-TK- 2A and 2B (now Source	16, 5.1, & 5.2	Subsumed in the facility-wide BACT limit for sulfur content. Carried the MR&R language based on the standard condition language adopted 5/3/02.

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Permit No.	Description of	Permit No.	How condition was revised
9671-AA001	Requirement	082TVP01	
Condition		Condition	
Number		Number	
	ID(s) 53 and 54).		
25 and Exhibit	Fuel oil bunker sulfur	7	Carried forward as revised in 082CP05.
D, item 6	analysis		
26	Excess emissions reporting	6.3c and 67	Revised in Construction Permit No 082CP05 to reflect the Title V standard condition language adopted 5/3/02, and incorporated requirement to notify the VMT oversight unit when exceeding tanker vessel opacity standard.
27	Notification requirement for violations of visible emission standards specified in 18 AAC 50.100 from a marine vessel berthed at the facility.	49	Revised in Construction Permit No 082CP05 to reflect the Title V standard condition language for "Air Pollution Prohibited" adopted 5/3/02.
29 and Exhibit D	Facility Operating Report	69	Replaced with Title V standard condition language, adopted 5/03/02.
30	General recordkeeping requirements	66	Replaced with Title V standard condition language, adopted 5/03/02. Record retention is now five years per regulation.
31	Display a copy of the permit	None	Not carried forward. No longer required.
32	User Fee Provision	Section 4	Regarding the emission fees, this condition was subsumed into standard condition; regarding user fees, the condition is outdated and no longer unnecessary.
Exhibit D, item 4(e)	Report number of hours operated per month per Air Stripper	None	No underlying basis or referenced condition from 9671-AA001 for such requirement.
Exhibit D, item 6	Report total amount of waste gas burned and mean heat content (Btu/cubic foot) in all three waste gas incinerators for each month. Report monthly average total fuel consumption in all power boilers and all waste gas incinerators (waste gas plus liquid fuel input) expressed as MMBtu/hr.	8.8	Same requirements, different format.
Exhibit D, item 7	Report total amount of solid waste, special oily wastes, and absorbent pads burned	None	This requirement is incorporated with the exemption requirements for 40 CFR 62 Subpart HHH in condition 28 of 082TVP01. Requirement is removed in Revision 1. APSC shutdown and removed Source ID 7, solid waste incinerator, from the facility on September 11, 2004, as a means of complying with 40 CFR 62 Subpart III (CISWI rules). (APSC Letter No. 1874. October 4, 2004).

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Table D - Comparison of Construction Permit Nos. 082CP04 (7/30/03) and 082CP04 Revision 1 (5/07/04) Conditions to Operating Permit No. 082TVP01 Conditions¹⁶

Permit No. 082CP04 Revision 1 Condition No.	Permit No. 082CP04 Condition No.	Description of Requirement	Permit No. 082TVP01 Condition No.	How condition was revised
None	15	Request for Department approval of MR&R alternatives	13	No change.
8.1	17.1	List of TBP Equipment	Section 3	Added the sources to the source inventory list as Source ID(s) 18 – 28.
8.2	17.2	Tank Bottoms Processing VOC emissions requirement	12.c	Carried forward as amended in 082CP04 Revision 1.
9	18	Authority to install/operate SVE system	Section 3	Added the sources to the source inventory list as Source ID 17.
10	19	Requirements for standard maintenance and operating procedures for TBP and SVE systems	12.1c and 44	Incorporated in the "Good Air Pollution Control Practices" standard condition adopted 5/03/02 and TBP monitoring and recordkeeping requirements.
11 – 18	20 - 27	Limits to avoid PSD classification as a modification under 18 AAC 50.300(h)(3)(b)(vi) and MR&R requirements	11 and 12	Carried forward as amended in 082CP04 Revision 1.
19 - 22	28 - 33	Industrial processes and fuel burning equipment (18 AAC 50.055) requirements	3 - 5 and Section 7	Incorporated in the Title V standard conditions adopted 5/03/02. Provided source-specific MR&R requirements. Rescinded periodic VE MR&R requirements (conditions 32 and 33.1 of 082CP04, 7/30/03) for the TBP boilers Source ID 18 (insignificant source).
Exhibit B	Exhibit E	TBP Solids measurements protocol	62	No change.

 $^{^{16}\,\}mathrm{This}$ table does not include all standard and general conditions

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. 082TVP01.

Conditions 1 - 2, Emission Fees

of incinerator in the State rules.

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are emissions of each air contaminant authorized by the permit (AS 46.14.250(h)(1)(A)). Air contaminant means any regulated air contaminant and any hazardous air contaminant. Therefore, assessable emissions under AS 46.14.250(h)(1)(A) means the estimated **potential** to emit any air contaminant identified in the permit, including those not specifically limited by the permit. For example, hydrogen chloride (HCl) emissions from an incinerator are assessable emissions because they are a hazardous air contaminant, even if there is currently no emission limit on HCl for that class

The conditions also describe how the Permittee may calculate actual annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air contaminant. Therefore, fees based on actual emissions must also be paid on any contaminant emitted whether or not the permit contains any limitation of that contaminant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match. The Permittee will normally pay for actual emissions - just with a one-year time lag.

Projected actual emissions may differ from the previous year's actual emissions if there is a change at the facility, such as changes in equipment or an emission rate from existing equipment.

If the Permittee does not choose to annually calculate assessable emissions, emissions fees will be based on "potential to emit" (PTE).

The PTE set forth in the condition is based on liquid fuel with a sulfur content of 0.5 percent by weight. If the actual sulfur content of the fuel is greater than these assumptions, the assessable emissions calculations provided by the Permittee should reflect the actual sulfur content. The change in these values may result in SO₂ emissions that could trigger PSD.

Condition 3 and Section 7, Visible Emissions Standard

Applicability: Regulation 18 AAC 50.055 applies to operation of all industrial processes and fuel-burning equipment in Alaska. Source ID(s) 1 - 3 and 8 - 17 are such equipment. Regulation 18 AAC 50.050 applies to incinerators. Source ID(s) 4 - 6 are incinerators.

Source ID(s) 24 - 27 (hydrocarbon vapors- and propane-fired internal combustion engines used in TBP processing) are qualified as nonroad engines as defined in 40 CFR 89.2, and are therefore not subject to the SIP emissions standards.

Factual basis: Condition 3 requires the Permittee to comply with the federal and the state visible emission standards applicable to fuel-burning equipment, industrial processes, and incinerators. The Permittee shall not cause or allow the equipment to violate these standards.

Condition 3 has recently been adopted into regulation as a standard condition. MR&R requirements are listed in Section 7 of the permit.

Liquid Fuel-Fired Sources, Incinerators, and Industrial Process Equipment:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Section 7. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

Department Guidance AWQ 02-014 states that on-site visible emissions monitoring is not required if the source is fired by gas. Although Source ID(s) 1 – 6 burn gas, this "gas" is waste gas collected from crude oil tanks and marine vessel loading and does not meet the quality of "fuel gas" described in the guidance. Moreover, liquid fuel is co-burned with the waste gas in these sources. Therefore the exemption from monitoring requirements for gasfired sources does not apply to Source ID(s) 1 - 6.

Recordkeeping - The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard and 2) deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Condition 4 and Section 7, Particulate Matter (PM) Standard

The PM standard of 18 AAC 50.055(b) applies to operation of all **Applicability:** industrial processes and fuel-burning equipment in Alaska. These standards are applicable to Source ID(s) 1 - 3 and 8 - 17.

The particulate matter emission standards listed in Table 4 under 18 AAC 50.050(b) apply to the operation of an incinerator based on its rated capacity. For this facility, Source ID(s) 4 -6 are waste gas incinerators, each of which has a rated heat input of 400 MMBtu/hr that corresponds to a PM standard for incinerators with rated capacity greater than or equal to 2,000 lbs/hr.

Factual basis: Condition 4 requires the Permittee to comply with the state PM standards (also called grain loading) applicable to fuel-burning equipment, industrial processes and

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incinerators. The Permittee shall not cause or allow the affected equipment to violate these standards.

MR&R requirements are listed in Section 7 of the permit.

Liquid Fuel-Fired Sources, Incinerators, and Industrial Process Equipment:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

Condition 5, Sulfur Compound Emissions

The sulfur emission standard applies to operation of all industrial **Applicability:** processes and fuel-burning equipment in the State of Alaska. Source ID(s) 1 – 3 and 8 - 17 are such equipment. The SIP standard for sulfur dioxide applies because it is contained in the federally approved SIP dated October 1983.

Factual basis: The condition requires the Permittee to comply with the sulfur emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

Monitoring – Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g. diesel or No. 2 fuel oil). Fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard. Fuel sulfur test results will verify compliance. For fuels with a sulfur content higher than 0.75 percent, the condition requires the Permittee to use Section 16 to calculate the sulfur-dioxide concentration using the equations to show that the standard is not exceeded.

Fuel gas sulfur is measured as hydrogen sulfide (H₂S) concentration in ppm by volume (ppmv). Calculations¹⁷ show that fuel gas containing no more than 4000 ppm H₂S will always comply with this emission standard. This is true for all fuel gases, even with no excess air. The fuel gas burned in Source ID(s) 1 – 3 is waste gas collected from crude oil tanks and marine vessel loading. Equations to calculate the exhaust gas SO₂ concentrations resulting from the combustion of fuel gas were not included in this permit.

Operating Permit No. 082TVP01 issued November 28, 2003 included condition 5.5 that required semi-annual analyses for H₂S by EPA Method 11 in samples representative of the waste gas burned in Source IDs 1 - 3 to verify compliance with the SO₂ standard in condition 5. However, the Permittee contested the semi-annual analyses frequency as excessive and unnecessary considering it is unlikely that analytical results will show H₂S amounts greater than 4000 ppm. The Department agreed to grant removal of the semi-annual monitoring requirement through an amendment request from the Permittee provided the Permittee will perform Method 11 analyses once that show H₂S concentrations in the waste gas indicative

¹⁷ See ADEC Air Permits Web Site at http://www.state.ak.us/dec/dawq/aqm/newpermit.htm, under "Stoichiometric" Mass Balance Calculations of Exhaust Gas SO2 Concentration."

of the relatively low values previously reported for waste gas. Such test shall be considered sufficient for the life of the permit to demonstrate compliance with sulfur compound emissions standard for the waste gas burned in Source ID(s) 1 – 3. The test was performed on June 23, 2004 with relatively low H₂S results, averaged at 0.31 ppm. As requested by the Permittee, this significant operating permit revision (082TVP01 Revision 1) addresses the removal of the semi-annual monitoring previously required in condition 5.5.

Recordkeeping - For diesel fuel, the Permittee is required to record the fuel sulfur content or fuel grade of each shipment and all material balance calculations. For waste gas, the Permittee is required to record the H₂S concentration of the waste gas.

Reporting – The Permittee is required to report as State excess emissions whenever the fuel combusted causes sulfur compound emissions to exceed the standard in this condition. The Permittee is required to include the material balance calculations for fuel oil in the excess emissions report. The Permittee is required to include copies of these records with the facility operating report.

For waste gas burned in Source IDs 1-3, the facility has submitted the H₂S results of the EPA Method 11 analyses conducted on June 23, 2004, showing compliance with sulfur compound emissions standard, with the facility operating report for 1st half 2004.

Conditions 6, Marine Vessel Visible Emissions Standards

Applicability: Applies because this is required by 18 AAC 50.070 particularly for marine vessels operations.

Factual Basis: The Department considers the tanker vessels loading or unloading operations as support activities for the VMT. Therefore the Permittee is responsible to ensure its support facilities to comply with the tanker emission standards. Condition 6 requires compliance with marine vessel visible emission standards. As applied to VMT, monitoring is required while a vessel is at berth for loading and unloading operations, during which the exhaust effluent of a marine vessel should not exceed 20 percent opacity except as provided in condition 6.a.

Conditions 7 - 17 (Section 6), Ambient air quality standards, maximum allowable ambient concentrations, BACT and PSD avoidance limits

Applicability: Apply because these are facility-specific requirements that were carried forward from previous operating and construction permits for compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, as well as, PSD avoidance and BACT limits.

Factual Basis: The limits imposed in these conditions were used by APSC to demonstrate compliance with NAAQS, BACT and PSD avoidance in its operating and construction permit applications for VMT. The same limits were used by the Department as basis for issuance of AQC Permit No. 9671-A001, 6/6/96 and previous construction permits.

Conditions 7 - 10 are requirements for APSC VMT facility to meet the ambient air quality standards (NAAQS). For condition 7, APSC relied on fuel oil sulfur content of 2% for berths 1 and 5, and 1% for berths 3 and 4, for short term modeling assuming there are 4 tankers

simultaneously at berth for their 1996 permit application. This worst case scenario resulted in cumulative predicted impacts approaching 91% of the 3-hour SO2 standard. APSC states that the 1995 demonstration has improved and the sulfur dioxide emissions now come from half the number of berths and the number of vessels calling over a year is down by about 40%. APSC also asserts that the margin of compliance with the short-term sulfur dioxide NAAQS standards is much greater now and as such requested the removal of the requirement. Until APSC demonstrates that the short-term impacts are below 60% of the 3-hour NAAQS, APSC is required to continue monitoring fuel oil bunker sulfur content.

AQC Permit No. 9671-AA001 imposed a fuel limit of 3,846 gallons in addition to 500 MMBtu/hr for Source ID(s) 1 - 3. APSC used a 469 MMBtu/hr as parameter (based on 1993-1994, 2-year average fuel use) for model input to demonstrate compliance with NAAQS standards. The margin of compliance for all pollutants was sufficiently adequate to approximate the boilers operation limit to 500 MMBtu/hr. The 3,846-gallons/hr limit appears to be based on 500 MMBtu/hr operation burning fuel oil with a heating value of 130,000 MMBtu/hr. APSC proposes to burn fuel gas in combination with fuel oil. Therefore, the fuel use limit of 3,846 gallons/hour is no longer necessary and as such, removed from the permit. Condition 8, therefore, requires only the 500 MMBtu/hr combined heat input limit for Source ID(s) 1 – 3. For the waste gas incinerators, Source ID(s) 4 - 6, the establishment of the 522-MMBtu/hr limit was based on the annual average fuel use in 1993-1994.

APSC relied on the operational-hour limits for Source ID(s) 8 – 16 in condition 9, and 500 MMBtu/hr limit on the power boilers (Source ID(s) 1 - 3) in condition 8 to demonstrate that the NAAQS standard could be met.

Condition 10 carries forward the requirements for the Crude Storage tanks (Source ID(s) 29 – 46) from AQC Permit No. 9671-AA001 and as revised in 082CP05. As amended in 082CP05, condition 10 prohibits venting of the tanks to the atmosphere. Venting occurrence can be monitored through internal pressure readings. A reading of 1.5" water column or higher indicates venting. When internal pressure reading drops down to 1.2" water column or less, it is an indication that vent valves have all closed and thus venting has ended. Condition 10.4 requires APSC to operate the crude oil storage tanks and the vapor recovery systems in accordance with the Best Operational Management Plant (BOMP), as part of the agreement settlement (item No. 19) in the Compliance Order by Consent (COBC) No. 90-2-4-6-262-1.

Conditions 11 - 13 are owner requested limits for the SVE system (Source ID 17) and the TBP equipment (Source ID(s) 18 – 28) in order to avoid PSD modification requirements for VOC's.

Condition 11.1 - 11.4 provide the MR&R requirements for the SVE system to ensure APSC compliance with the 5-ton limit of condition 11. To verify the emission of the VOC, at least once each month, APSC shall sample the SVE exhaust and measure the organic compound emission rate as carbon, using testing, calibration and calculations procedures of section 7 and 8 of 40 CFR 60, Appendix A, method 25 A (July1, 1995 ed). APSC shall measure the stack gas flow rate and use the measurements collected to calculate and record the mass rate of organic compounds as carbon each month.

In condition 12, the Permittee is required to limit VOC emissions from tank bottom processing (TBP) system (Source ID(s) 1-28) to no more than 18.5 tons per 12-month consecutive period. As part of compliance monitoring for the VOC emissions limit, condition 12.a sets an operational hour-limit per consecutive 12-month period for the TBP system and TBP boilers as well as heat input to the TBP boilers. APSC relied on these limits in the construction permit application to demonstrate that the project does not cause or contribute to a violation of an ambient air quality standard or increment as required by 18 AAC 50.315(e)(2). Removing the operating limits of the boilers could warrant ambient impact assessment and PSD pre-construction review for SO₂ APSC's application for permit No. 0071-AC005 specifically requested the hourly operating limit for the boilers to avoid PSD review. Permit No. 082CPO4 sets an operating hour limit of 4,368 hours for the TBP system and operating hour limit for the boilers.

APSC states that 18.5 tons per year of VOC limit in condition 12 and 130,000 barrels per year of TBP in condition 12.b is equivalent to the operating hour limit of the boilers. The quantity of tank bottoms processed and the VOC emissions from TBP are dependent on the operating hours of the boilers. The boiler emission calculations are based on 4,368 hours of operation not on the quantity of tank bottoms processed. With current restrictions, the SO₂ emissions were estimated to be 21 tpy. This translates to 42 tpy for unrestricted operations in excess of the PSD SO₂ significant emission threshold. Moreover, Permit no. 082CPO4 authorizes the use of the boilers for tasks other than TBP. The ambient impact assessment for the TBP system also assumed the owner-requested limit of 4,380 hr/yr. To protect ambient air quality, the Department has retained the 4,368-hour limit.

Conditions 12.a - 12.d provide the operational restrictions for VOC emissions. The catalytic converters and carbon adsorption beds are significant in controlling VOC emissions. Emission controls consist of internal combustion engines with catalytic converters (Source ID(s) 24 - 27) to combust hydrocarbon vapors emitted from the TBP system during all times of TBP operations, with two carbon adsorption beds (Source ID 28) run in parallel to handle VOC vapors in excess of the engines' capacity. Condition 12.d requires internal combustion engines and carbon adsorption beds to destroy VOC and maintain negative pressure on the system. APSC proposed to simplify the requirement to operate the TBP system under negative pressure. APSC committed to control the vapors generated from the dryer at all times (regardless of temperature) and APSC has the flexibility to monitor temperature.

Condition 12.1 - 12.4 provide the monitoring, recordkeeping and reporting requirements associated with the TBP operations and VOC emissions.

Condition 13 allows the Permittee to seek Department's approval for alternative MR&R requirements for the SVE and TBP systems other than that which is provided in this permit.

Conditions 14 - 17 are BACT limits established in AQC Permit No. 9671-AA001 for visible emissions, PM, and nitrogen oxides for the waste gas incinerators, Source ID(s) 4 - 6; and facility-wide sulfur content limit as compliance monitoring for sulfur dioxide emissions standard.

For condition 14, a 10-percent BACT opacity limit is imposed as a surrogate measure to ensure that the incinerators, Source ID(s) 4 – 6, comply with the PM standard.

For condition 15, the 34.4-lb/hr limit for PM emissions rate for Source ID(s) 4 - 6 is based on the 400 MMBtu/hr rating of each incinerator and the emission factor of 0.086 lbs/MMBtu which was used as a basis for modeling analysis in the 1995 BACT determination. AOC Permit No. 9671-AA001 condition 16 required APSC to source test the incinerators to ensure compliance with the required standard. Source tests carried out in 1998 revealed that the average total particulate matter emission rate is 7.71 lb/hr, resulting in a significant margin of compliance. As such condition 15.3 requires source testing the incinerators only when the visibility through the exhaust exceed the BACT limit of 10 percent for visible emissions as provided in condition 14.

Based on the Technical Analysis Report for AQC Permit No. 9671-AA001, the Department determined that fuel-staged NOx burners are BACT for the waste gas incinerators with an emission limitation of 0.4 lb/MMBtu, as required in condition 17. The limit is comparable to NSPS Subpart Db for boilers, which burn fuel oil and have a heat input rate greater than 100 MMBtu/hr.

Conditions 18 - 27 (Section 7), Visible Emissions and PM Monitoring Plan

Applicability: Applies because these conditions detail the monitoring, recordkeeping, and reporting required in conditions 3 and 4.

Each permit term and condition must include MR&R requirements **Factual Basis:** showing verifiable compliance with each permit term and condition. The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Facility Operation and Maintenance Program, that the facility is in continuous compliance with the State's emission standards for visible emissions and particulate matter. The correlation between particulate matter and visible emissions that is the basis for this monitoring procedure is discussed under conditions 3 and 4.

Source ID(s) 8 – 16 are diesel-fired emergency generators that may be potentially insignificant due to actual emissions rates. The Department has issued a guidance for dualfuel fired sources using 400 operational hours in back-up liquid fuel as a **threshold** trigger for visible emissions monitoring. The same **threshold** can be applied to Source ID(s) 8 – 16, as described in condition 18. Should any of the sources exceed the 400-hour operational threshold, the source will be subject to periodic MR&R requirements described in conditions 19 - 24.

Conditions 19 - 27 detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired sources. For this permit, the equipment types covered by these conditions are the internal combustion engines, boilers, and incinerators. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the selfmonitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from sources either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Conditions 28 - 32, NESHAPs Subparts A and Y Requirements

NESHAP 40 CFR 63 Subpart Y and the associated general provisions in Subpart A apply to facilities engaged in marine tank vessel loading operations subject to MACT or RACT standards. NESHAP 40 CFR 63.562(d) Subpart Y provides specific MACT and RACT standards for Valdez Marine Terminal.

Factual basis: These standards are set to regulate HAPs emissions during marine tank vessel loading and unloading operations. The Permittee shall comply with the applicable requirements of NESHAP Subparts A and Y.

The Permittee contested the accuracy of 40 CFR 63 Subpart Y specific requirements set in conditions 31 and 34 of 082TVP01 issued November 28, 2004. 082 TVP01 Revision 1 addresses the interim agreement made by the Department and the Permittee by replacing conditions 29 and 32 with general statements to refer the applicability of 40 CFR 63 Subpart Y to the facility. The Permittee agreed to submit an application amendment by October 31, 2004 for an operating permit revision with proposed replacement conditions specifying the provisions of 40 CFR 63 Subpart Y that apply to the permitted facility, and the emissions units to which they apply.

Conditions 33 - 34, NESHAPS Subparts A and EEEE, Standards for Organic HAPs emitted from Organic Liquids Distribution (OLD) (non-gasoline)

Applicability: NESHAP Subpart EEEE and associated general Subpart A provisions apply to facilities engaged in Organic Liquid Distribution activities. The subpart applies to VMT because it is engaged in such operations and is a HAP major facility.

Factual basis: The final rule for this subpart was issued on August 25, 2003. Existing sources subject to Subpart EEEE must be in compliance with the applicable requirements within three years from the date the final rule is published in the Federal Register. The Permittee shall comply with the applicable emission limitations, operating limits, and work practices, as well as determine and conduct appropriate compliance options in order to meet these standards.

Condition 35, NESHAPS Applicability Determinations

The Permittee has the responsibility to determine if specific federal **Applicability:** regulations apply to its facilities.

The Permittee has conducted an analysis of the facility and determined **Factual basis:** that it is a major HAPs facility based on emissions. This condition requires the Permittee to keep and make available to the Department copies of the major facility determination.

Conditions 36 - 37, Halon Prohibitions

Applicability: These prohibitions apply to all facilities that use halon for fire extinguishing and explosion inertion. The Valdez Marine Terminal uses halon and is therefore subject to the federal regulations contained in 40 CFR 82.

Factual basis: These conditions incorporate applicable 40 CFR 82 requirements. The Permittee may not cause or allow violations of these prohibitions.

Conditions 38-41, Insignificant Sources

These general emission standards apply to all industrial processes fuel-**Applicability:** burning equipment, and incinerators regardless of size.

The conditions re-iterate the general standards and require compliance for Factual basis: insignificant sources. The Permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The Department finds that the insignificant sources at this facility do not need specific monitoring, recordkeeping and reporting to ensure compliance under these conditions, except as noted in condition 38.4 for Source ID 18. Source ID 18 is a group of boilers for Tank Bottom Processing, subject to operational limits in conditions 12.a(i) and 12.a(ii) to keep them insignificant under 18 AAC 50.335(r).

State air quality regulations adopted effective May 3, 2002 allow for an average six minute opacity observation. The existing regulation, limiting opacity to no more than 20% for more than 3 minutes in any one hour, is included because EPA Region X has not formally approved the changed opacity regulation as part of Alaska's State Implementation Plan (SIP).

Condition 42, Asbestos NESHAP

Applicability: The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

The condition requires the Permittee to comply with asbestos demolition Factual Basis: or renovation requirements in 40 C.F.R. 61, Subpart M. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with these federal regulations.

Condition 43, Refrigerant Recycling and Disposal

Applies if the Permittee engages in the recycling or disposal of certain **Applicability:** refrigerants.

The condition requires the Permittee to comply with the standards for **Factual Basis:** recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F, that will apply if the Permittee uses certain refrigerants. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with this federal regulation.

Condition 44, Good Air Pollution Control Practice

Applies to all significant sources and sources with a control device, except **Applicability:** NESHAPS and NSPS regulated sources.

Factual basis: The condition requires the Permittee to comply with good air pollution control practices for all sources.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 45, Dilution

Applicability: This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 46, Reasonable Precautions to Prevent Fugitive Dust

Applicability: Bulk material handling requirements apply to the Permittee because the Permittee will engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the facility.

The underlying regulation, 18 AAC 50.045(d), requires the Permittee to **Factual Basis:** take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

Condition 47, Stack Injection

Applicability: Stack injection requirements apply to the facility because the facility contains a stack or source constructed or modified after November 1, 1982.

Factual Basis: The condition prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

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Condition 48, Open Burning

Applicability: The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the facility.

Factual Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the facility.

No specific monitoring is required for this condition. Condition 50.1f requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Additional monitoring is achieved through condition 49, which requires a record of complaints.

Condition 49, Air Pollution Prohibited

Applicability: Air Pollution Prohibited requirements apply to the facility because the facility will have emissions.

The condition prohibits the Permittee from causing any emission which is **Factual Basis:** injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the Department.

The Department will determine whether the necessary actions were taken. No corrective actions are necessary if the complaint is frivolous or there is not a violation of 18 AAC 50.110, however this condition is intended to prevent the Permittee from prejudging that complaints are invalid.

Condition 50, Technology-Based Emission Standard

Technology Based Emission Standard requirements apply to the facility **Applicability:** because the facility contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with condition 67. Excess emission reporting under condition 67 requires information on the steps taken to

minimize emissions. Monitoring of compliance for this condition consists of the report required under condition 67.

Condition 51, Hazardous Air Pollutant (HAP)¹⁸ Reconstruction

Applies to the facility because the facility is a hazardous air pollutant-(HAP-) major facility as described in 18 AAC 50.300(f).

The condition requires the Permittee to obtain written approval from the **Factual Basis:** Department before reconstructing a HAP-major source. Pre-construction approval for reconstructing a HAP-major source is a requirement of the Clean Air Act. Alaska's construction permit program does not require a construction permit for reconstructing a source, only for reconstructing a facility. Therefore, this condition is a standard condition in all HAP-major facility operating permits.

Condition 52, Permit Renewal

Applicability: Applies if the Permittee intends to renew the permit.

Factual Basis: The Permittee is required to submit an application for permit renewal by the specific dates applicable to Valdez Marine Terminal as listed in this condition. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Condition 53, Requested Source Tests

Applicability: Applies because this is a standard condition to be included in all permits.

Factual Basis: The Permittee is required to conduct source tests as requested by the Department. Monitoring consists of conducting the requested source test.

Conditions 54 - 56, Operating Conditions, Reference Test Methods, Excess Air Requirements

Applicability: Apply because the Permittee is required to conduct source tests by this permit.

Factual Basis: The Permittee is required to conduct source test as set out in conditions 54 through 56. These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with conditions 54 through 56 consists of the test reports required by condition 61.

Condition 57, Test Exemption

Applicability: Applies when the source exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), 5/03/02, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

¹⁸ Also known as Hazardous Air Contaminant (HAC).

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Conditions 58 - 61, Test Deadline Extension, Test Plans, Notifications and Reports

Applicability: Apply because the Permittee is required to conduct source test by this

permit.

Factual Basis: Standard conditions 18 AAC 50.345(1) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with this condition.

Condition 62, Tank Bottom Solids Measurement Description

This is a condition carried forward from Construction Permit No.082CP04 **Applicability:** Revision 1, 5/07/04 (originally from Construction Permit No. 0071-AC005, 5/24/04). Applies because it is a facility-specific requirement derived from a previous construction permit.

Factual Basis: This condition describes how the tank bottoms solid volume computations using AutoCad version 14 software and the Digital Terrain Model in Softdesk 8 Civil/Survey.

Condition 63, Certification

This is a standard condition to be included in all permits. Applies because **Applicability:** every permit requires the Permittee to submit reports.

This condition requires the Permittee to certify all reports submitted to the **Factual Basis:** Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be **certified** with the facility report, even though it must still be **submitted** more frequently than the facility operating report. This condition supplements the reporting requirements of this permit.

Condition 64, Submittals

Applies because the Permittee is required to send reports to the **Applicability:** Department.

Factual Basis: This condition requires the Permittee to send submittals to the address specified in this condition. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of this permit.

Condition 65, Information Requests

Applies to all Permittees, and incorporates a standard condition. **Applicability:**

Factual Basis: This condition incorporates a standard condition in regulation, which requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 66, Recordkeeping Requirements

Applicability: Applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide an evidence of compliance with this requirement.

Condition 67, Excess Emission and Permit Deviation Reports

Applicability: Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The reports themselves and the other monitoring records required under this permit provide monitoring of whether the Permittee has complied with the condition. Please note that there may be additional federally required excess emission reporting requirements.

Condition 68, NSPS and NESHAP Reports

Applies to facilities subject to NSPS and NESHAP federal regulations. **Applicability:**

The condition supplements the specific reporting requirements in **Factual Basis:** 40 C.F.R. 60 and 40 C.F.R. 61. The reports themselves provide monitoring for compliance with this condition.

Condition 69, Operating Reports

Applicability: Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

Condition 70, Annual Compliance Certification

Applicability: Applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. The reports themselves provide monitoring for compliance with this condition.

Conditions 71 - 77, Standard Conditions

Applicability: Applies because these are standard conditions to be included in all

permits.

Factual Basis: These are standard conditions required for all operating permits.